



BY-LAWS

REGULATING THE CONSTRUCTION,
SANITATION, MAINTENANCE
AND INSPECTION OF

BUILDINGS



1923



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REGULATING THE CONSTRUCTION,
SANITATION, MAINTENANCE
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BUILDINGS



1923



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CITY OF EDMONTON

BY-LAW No. 34, 1923

A By-law to regulate the construction, sanitation, maintenance and use of buildings in the City of Edmonton.

The Municipal Council of the City of Edmonton, duly assembled, enacts as follows:—

PART 1.

DEFINITION OF TERMS

1. Where the following words occur in this by-law they shall be construed in the manner hereinafter mentioned unless a contrary intention appears, or the interpretation which this provision would give to any word, expression or clause is inconsistent with the context of the clause in which it occurs:

ALTERATION

(1) "Alteration" shall mean any change to the exterior or interior of a building or any of its parts which affects its arrangement or appearance.

REPAIRS

(2) "Repair" or "Repairs" shall mean the renewal of parts of a building which may be affected by wear or decay and which in the opinion of the Inspector does not affect its strength or sanitation or increase its fire risk.

APARTMENT OR TENEMENT HOUSE

(3) "Apartment house" or "Tenement house" shall mean a building or a part thereof which is

arranged so as to be occupied by three or more families living independently of each other.

LODGING OR ROOMING HOUSE

(4) "Lodging house" or "Rooming house" shall mean a building where temporary lodging accommodation is provided.

OFFICE BUILDING

(5) "Office building" shall mean a building arranged so as to be used for offices or business purposes and which may have living rooms for the janitor and his family only.

THEATRE BUILDING

(6) "Theatre" shall mean any building having a stage with fixed or movable scenery, and used for dramatic, operatic or other entertainments, and shall include moving picture houses and assembly halls.

HOTELS

(7) "Hotel" shall mean any building or part thereof containing fifteen or more rooms and having a general dining-room and used for supplying food and shelter to residents or transients.

PUBLIC BUILDING

(8) "Public Buildings" includes churches, chapels, seminaries, colleges, convents, schools, hospitals, asylums, hotels, theatres, libraries, halls, concert rooms and all other places used or so intended to be used for public assemblage. A part of a building used for any of these purposes shall be considered a separate building.

INSPECTOR

(9) "Inspector" shall mean the Building Inspector of the City of Edmonton or his assistant.

FRAME BUILDING

(10) "Frame building" or "wooden building" shall mean and include any building of which the frame or any portion thereof in the exterior walls

of the building is of wood, regardless of its external covering.

PART 2.

ORGANIZATION OF DEPARTMENT

APPOINTMENT OF INSPECTOR

2. There shall be in the City of Edmonton a Department known as the Department of the Inspector of Buildings which shall be charged with the enforcement of this By-law.

STAFF

3. The Department shall consist of an Inspector and as many assistants as may be necessary from time to time.

QUALIFICATIONS

4. The Inspector shall be a registered architect or practical builder. Assistants shall be competent men of experience in the building trades.

DUTIES OF INSPECTOR

5. The Inspector shall take care of plans and descriptions of buildings deposited with him and shall keep record of all matters in connection with the construction or maintenance of buildings.

INSPECTION OF PLANS

6. If upon careful examination by the Inspector the plans are found to conform to the provisions of this By-law, one set shall be returned to the Applicant marked "Approved" and the second set shall be retained by the Inspector; if otherwise, a permit shall not be granted until the necessary corrections are made. Any deviation from the original plan shall be reported to the Inspector for approval.

INSPECTION OF BUILDINGS

7. The Inspector shall have the right to enter any building in the performance of his duties and shall have the power to enforce all reason-

able measures which in his opinion may be in the interest of safety.

APPEAL.

8. Should any dispute arise between the Inspector and the Owner or Agent recourse shall be made to a Board of Appeal consisting of three members: one appointed by the City Council, one by the President of the Alberta Association of Architects, and one by the President of the Edmonton Builders' Exchange. The services of this Board shall be paid for as the Board may decide, and any decision made by it shall be final and binding upon all parties.

PERMIT FEES

9. The permit fees shall be: Building or alteration up to the value of—

\$ 500.00	\$.50
500.00 to \$2,000.00.....	1.00
2,000.00 to \$5,000.00.....	2.00
And for each additional \$5,000.00 or fraction thereof.....	1.00

Moving permit, 50 cents, and \$2.50 for each and every day or part thereof that the building being moved may occupy a part of any street or other public place; all fees to be collected when permit is issued and before any work is commenced.

PART 3.

GENERAL CONDITIONS

BUILDINGS TO CONFORM TO BY-LAW

10. No building or part of a building within the City of Edmonton shall be erected, remodelled, renewed, or repaired, except in accordance with the terms of this By-law; and not until a permit has been issued by the Inspector authorizing the erection, remodelling, renewal or repair thereof. Minor repairs not exceeding in value

fifty dollars are not to be considered within the terms of this By-law

PERMIT FOR WATER

11. When application for a permit is made the applicant shall supply the Inspector with quantities of masonry, concrete and plastering in the proposed construction and shall pay the Inspector acting for the Waterworks Department according to the rates then current such sum as may be payable to the City for water required in the proposed work before the issuing of the permit

LIMITATION OF PERMIT

12. Every permit issued under the provisions of this by-law shall lapse at the expiration of three months from the date thereof unless the proposed construction therein mentioned has been actually commenced

DEMOLISHING BUILDINGS

13. When application is made to build which will necessitate the removal or demolition of an existing building all work in connection therewith shall be carried out with due regard to public safety and that of the workmen engaged in the work and every such precaution shall be taken for the prevention of accident as the Inspector directs

INCLUDES ALL BUILDINGS

14. All the provisions of this By-law shall apply with equal force to all public buildings as well as private.

SPECIFICATIONS

15. Standard specifications will be accepted in the interpretation of the terms of this By-law.

APPROVE ON REJECT PLANS

16. Plans and Specifications in duplicate shall accompany all applications for permit to build. Plans for all public buildings or any building estimated to cost \$10,000.00 or more, shall be

prepared by a competent architect or engineer registered in the Province of Alberta

REVOCATION

17. Every permit shall be subject to suspension in writing should the Inspector ascertain that the work is not being carried on in accordance with the plans and specifications filed with him. Any person continuing work during any suspension shall be guilty of a breach of this By-law.

CERTIFICATE OF FINAL INSPECTION

18. Upon the completion of a building a statement shall be filed with the Inspector showing the exact cost of the building whereupon and after due inspection a certificate of final inspection shall be issued. No building shall be occupied until a final certificate has been issued.

BUILDING MATERIAL ON STREET

19. At least three days notice shall be given to the Inspector before the commencement of work on any building or excavation giving detailed description of proposed construction or alteration together with the names of the owner, architect and contractor and location.

20. If in the opinion of the Inspector or the town-parks use of a street or side walk is necessary he shall if the builder requests give a permit in writing defining the portion of the street or side walk which may be used upon the owner or contractor giving security in the sum of five hundred dollars satisfactory to the City Commissioners, holding the City harmless against all damages it may be put to by reason or arising out of the issue of the permit or anything done or permitted thereunder.

TEMPORARY USE OF SIDE WALKS

21. Such temporary use of a street shall not mean any portion nearer than twelve feet to any

street railway track or permit any obstruction to a fire hydrant.

PROTECTION OF SIDEWALKS

22. The portion of the street or side-walk temporarily used by builders must be enclosed by a tight board fence at least six feet high and such other means of safety shall be taken as the Inspector directs, including a walk for pedestrians. All side-walks shall be protected as the Inspector may order and any damage thereto made good at completion as provided in the permit.

COVERING SIDE WALKS

23. No part of the street or side walk shall be used for the storage of building material except according to the preceding section and the terms mentioned in the permit, nor shall any material be placed so as to obstruct the passage of water in the drains or gutters. No permission shall be given to occupy more than one third of the width of the street except by the special authority of the City Commissioners.

MORTAR AND MATERIAL ON STREET

24. No mortar shall be mixed or prepared or stone or other building material be cut or dressed in the space allowed on the street nor shall earth or material taken from the site of operation be stored or allowed to remain except as may be required for subsequent use therein.

GANTRIES AND PROTECTION OF SKYLIGHT

25. When buildings are being constructed or increased in height where there are bus lines premises on either side no portion of the street shall be occupied except for a gentry which shall be erected and maintained so that pedestrians shall be protected from any falling dust or debris a passage of at least eight feet in height shall be provided of the width demanded by the Inspector. Skylights and roofs of adjoining

buildings must be protected as required by the Inspector.

NO PERMIT SHALL BE GRANTED

26. No permit shall be granted to use any portion of a street or sidewalk contrary to the terms of this By-law

LIMITATION OF STREET PERMIT

27. No permission shall be given authorizing the use of any street for more than one week prior to commencement of operations in connection with any particular building, or for longer than five months during operations, but the time may be extended for such further period as in the opinion of the Inspector may be necessary. In the event of the suspension of work the street must be cleared of all obstructions and kept clear until operations commence again.

28. Any person placing or storing building material on any street or sidewalk in any part of the City shall be held responsible for any damage which may be occasioned thereby to persons or property.

OWNER RESPONSIBLE FOR SIDEWALK FOR FIVE YEARS

29. Whenever any building is hereafter constructed in the City all voids between the foundation walls and earth bank on adjacent street sides shall be back filled or grouted so as to overcome any settlement of street or sidewalk and the owner shall supply the City Commissioners in the sum of \$1,000.00 to indemnify the City against all costs, charges or damage it may be put to by reason of subsidence of the sidewalk or street.

NO NOTICES ON HARBOR WALK

30. No advertisement other than that of the owner, architect, contractor, supply men, recent or prospective tenant shall be placed on any

fence or covered way enclosing space occupied by the builder and these only in such form as is approved by the Inspector. A sufficient number of red lights shall be placed in conspicuous places on every such fence or covered way and kept burning from dusk to daylight.

PART 4.

RESTRICTIONS AND LIMITATIONS

LIMITATION OF FLOOR AREA.

31. No restriction is placed on the floor area of fireproof buildings. In all other buildings hereafter erected in the City no single area between exterior or party walls shall exceed 7,500 square feet, unless equipped with automatic sprinklers.

BUILDINGS OVER 70 FEET HIGH FIREPROOF

32. Every building being over four storeys in height (except church spires and grain elevators) hereafter erected or substantially altered in the City shall be fireproof. Churches with a seating capacity of twelve hundred or more on the main floor shall be fireproof.

HOTELS AND APARTMENTS

33. Every building used, or intended to be used, for a college, public school, hotel, lodging house or dormitory and exceeding three storeys in height, including the ground floor, shall be fireproof.

HOSPITALS AND THEATRES

34. Every hospital, asylum, or institution for the care or treatment of persons, and being over thirty-five feet high, and all theatres with a seating capacity of more than seven hundred and fifty, shall be fireproof.

BOILER ROOMS

35. All boiler and fuel rooms shall be fireproof except in private dwelling houses.

ALTERATIONS TO FRAME BUILDINGS IN FIRST FIRE LIMITS.

36. No alteration or repair shall be made to a frame building within the First Fire Limits if the cost of the proposed alteration or repair exceeds one-half of the actual value of the building, or increases the height or ground area of such building.

ONE HOUSE ON LOT

37. No building intended or used for a dwelling for one or more families shall be located so as to front any public street or avenue less than thirty feet in width.

RE-SUBDIVISION OF LOTS

38. No plan of a sub-division of any lot or lots within the City of Edmonton shall be approved of, or consented to by or on behalf of the City unless each and every separate lot or parcel of land therein shall have an area of at least three thousand square feet nor unless there is a lane of at least twelve feet in width in the rear of each lot or parcel contained in the sub-division nor unless each such lot or parcel has a street frontage of the full width thereof.

39. No frame building within or without the First Fire Limits shall be moved to any position within the first fire limits.

40. No recess or chase shall be made in any external or party wall so as to leave the thickness at back thereof less than eight inches.

41. No roof or floor timber entering a party or partition wall shall have less than four inches of solid brick work between it and the end of any other timber.

42. No part of any roof shall be constructed in such a manner as to discharge snow, ice or other material upon a street, or otherwise endanger the public.

43. No temporary staging or stand for observation purposes shall be constructed or occupied upon any roof of any building unless special provision has been made in the original design or plans thereof.

44. No chimney shall be corbelled from a wall more than the thickness of that wall.

45. No chimney shall be hung from a wall which is less than twelve inches thick.

46. No chimney shall be carried on combustible supports.

47. No masonry shall rest on wood, except piles.

48. No part of any floor timber shall be within one inch of any chimney.

49. No studding or lurring shall be within one inch of any chimney.

50. No furnace or boiler for heating a building shall be placed upon a wooden floor.

51. No timber shall be used in any wall of any building when the walls are of stone, brick, cement, concrete or iron, except inside laths as hereinafter provided, and brace blocks not more than eight inches in length, with not less than sixteen inches of masonry between them.

ENCROACHMENTS AND PROJECTIONS

52. No step or steps, porch, store or shop window bay or case, window, sign, fire escape, or other projection or structure shall encroach upon or project over the line of any street, lane or other public property, provided, that after the height of twelve feet above the street grade, and then only, on the street sides, eighteen inches may be used for bay and oriel windows, balconies, belt courses and projections of a like nature and three feet may be used for the main cornice surmounting the super-structures, all of which shall

be built of incombustible material, except as by law otherwise provided.

Provided that with the approval of the City Commissioners marquees, if constructed entirely of incombustible material, may be placed over the main entrance only of churches, theatres, hotels, or buildings of a like nature. Such marquees must be securely hung and anchored to the building without supports from the ground or sidewalk. Any glass that may be used in the roof shall be guarded and protected by rods and strong wire mesh both over and under the glass. Storm water from the roof shall be conducted by pipes to the sewer, all of which shall be subject to the approval of the City Commissioners.

Drawings of such marquees shall be filed with the Building Inspector together with a plan of the building to which it is proposed to be attached.

WEAKENING OF STRUCTURE

53. No timber joists or partitions or any structural members of a building shall be cut for the admission of pipes, wires or other utilities so as to in any way weaken the structure.

VENTILATION OF BATH ROOMS, ETC

54. No bath-room, or toilet room, and no pantry or cupboard intended for storage of food stuffs, shall hereafter be erected unless such bath room, toilet, pantry or cupboard is provided with ventilation by a window or by a flue at least 48 inches in area.

55. No office building shall be used as a lodging-house, rooming-house, apartment or hotel unless all the requirements applying to such places are complied with.

56. Every room used for sleeping purposes in any building shall contain at least 400 cubic feet of air space for each occupant.

EAVES-TROUGHS

57. No eaves-trough, rain water conductor or gutter pipe shall be built or constructed so as to permit or cause water from the roof of any building to escape upon, flow over or run across or upon any sidewalk or adjoining property and the Inspector shall require the owner or agent of any building hereafter erected, rebuilt or repaired, to connect all conductors of roof water to the public sewers.

58. No stool or seat shall be placed in any of the aisles or passages of any church, theatre or other public building, nor shall any person or persons be allowed to occupy standing room in any such aisle or passage during any services or entertainment.

PART 2.

FIRE LIMITS

59. The fire limits of the City of Edmonton shall be divided and known as the First, Second and Third Limits.

FIRST FIRE LIMITS, NORTH SIDE

(1) The first fire limits of the City of Edmonton North of the Saskatchewan River shall be all that portion of the City contained within the following boundaries: Commencing at the intersection of 97th Street with Jasper Avenue, thence East along the centre line of Jasper Avenue to its intersection with the centre line of 56th Street, thence North along centre line of 56th Street to its intersection with the centre line of 101st Avenue, thence West along the centre line of 101st Avenue to its intersection with the centre line of line East of 97th Street thence North along centre

line of said lane to its intersection with the centre line of 104th Avenue thence West along centre line of 104th Avenue to its intersection with the centre line of 101st Street thence South along the centre line of 101st Street to its intersection with the Southern Boundary of Railway right-of-way, thence West along Southern boundary of Railway right of way to its intersection with the centre line of lane West of 104th Street thence South along centre line of lane West of 104th Street to its intersection with the centre line of lane North of and parallel with Jasper Avenue thence West along centre line of said lane to its intersection with the Eastern boundary of the C.P.R. right-of-way thence South along Eastern boundary of said right-of-way to its intersection with the centre line of lane South of and parallel to Jasper Avenue, thence East along centre line of said lane to its intersection with the centre line of 102nd Street thence South along centre line of 102nd Street to its intersection with the centre line of McDonald Drive thence East along centre line of McDonald Drive to brow of high bank East of 101st Street thence East along line of high bank to its intersection with the centre line of 97th Street, thence North to point of commencement.

FIRST FIVE- LIMITS, SOUTH SIDE

Also that portion of the City South of the Saskatchewan River and within the following boundaries Commencing at the intersection of the centre line of 163rd Street with the lane North of Whyte Avenue thence West along centre line of said lane to the intersection with the centre line of 103th Street thence South along the centre line of 103th Street to its intersection with the centre line of lane South of Whyte Avenue thence East along the centre line of the said lane to its

intersection with the centre line of 103rd Street, thence North along centre line of 103rd Street to point of commencement

SECOND FIRE LIMITS

(2) The second fire limits of the City of Edmonton shall be all that portion of the City not embraced in the area described as the first fire limits, where sewer and water mains are now or hereafter may be laid.

THIRD FIRE LIMITS

(3) The third fire limits of the City of Edmonton shall be all that portion of the City not embraced in the first and second fire limits.

BUILDINGS IN FIRST FIRE LIMITS

60. No frame or wooden structure shall hereafter be built within the said first fire limits or as they may hereafter be established except the following

(a) Temporary one storey frame buildings for use of builders.

(b) One storey sheds open on one long side for the housing or protection of vehicles. The area of any such shed not to exceed five hundred square feet. Enclosed sides shall be covered with incombustible material. No wooden fence shall be used to form the back or sides of any such shed.

(c) Wooden fences not more than ten feet high.

(d) Box windows where covered with incombustible material and glazed with wired glass.

(2) No wooden shed shall be located within two feet of any lot line or less than twenty feet from any other building.

(3) All roofs placed on any such building shall be covered with incombustible material.

61. No building not at present used as a public garage, bakery, dry-cleaning establishment, or coffee roasting establishment shall hereafter be

used for any of the said purposes, unless such building is of fire-proof construction, or is altered so as to be of fire proof construction.

NEW BUILDINGS

62. All new buildings or additions to buildings in the first fire limits shall have outer walls of brick or other permanent material.

ROOF COVERING

63. Every building hereafter erected within the first fire limits, shall be roofed with incombustible material, and existing shingle roofs within the first fire limits, when for any cause renewed shall be renewed with incombustible material.

PART 6.

MOVING BUILDINGS

LICENSED MOVERS

64. The business or occupation of moving buildings shall be conducted by movers, duly licensed under the By-laws of the City.

Application for the permit required by By-law 25, 1917 as from time to time amended or re-enacted shall be made in writing to the Inspector by the mover, giving name of owner and mover, accurate size and height of building, location proposed location and proposed route at least three days before the building is moved. He shall pay to the Inspector a permit fee of fifty (50c) cents and a further sum of two and one half dollars (\$2.50, for every day or fraction thereof that such building may occupy any part of a street or other public property. The mover shall before issue of the permit deposit with the Inspector such sums as may be required by the different departments of the City as a guarantee that any damage to City property shall be repaired at his expense. No permit shall be granted to move

a building from property in respect to which taxes are in arrears.

RETURN OF DEPOSIT

65. The Inspector shall ascertain from the different departments what expense, if any, has been incurred and in the event of the deposit being more than sufficient the balance shall be refunded and if the deposit is not sufficient the difference shall be paid by the person obtaining the permit.

NOTICE TO DEPARTMENTS

66. Before issuing the permit the Inspector shall give not less than three days notice to the departments interested outlining the proposed work and any other necessary information. The permit will not be issued without approval of the superintendent of the Departments affected and a copy of all permits shall be forwarded to the different departments as soon as issued.

INTERFERING WITH WIRES

67. No person engaged or employed in moving any building shall in any way handle or disconnect any telephone, electric light, or street railway wire or in any way injure any city property or anchor any rope or other apparatus to any hydrant or telephone manhole or utility pole.

PART 7

EXCAVATIONS AND FOUNDATIONS

PROTECTION

68. All excavations shall be guarded and protected and kept from becoming dangerous to life and limb, and shall be close timbered by the party responsible if in the opinion of the Inspector it

is necessary to prevent the caving of adjoining earth.

NOTICE TO OWNER

69. When any excavation shall be intended to be carried below existing foundations on adjoining property the owner or contractor shall give the owner or agent of the adjoining property notice of his intention to carry such excavation below such existing foundations.

FIXATION

70. The sustaining capacity of the soil or ground in the City is estimated at two tons per square foot. When the load exceeds two tons per square foot tests shall be made to prove the sustaining power of the earth and a record of such test kept by the Inspector.

PART 8.

WALLS, PIERS, PARTITIONS

FOUNDATIONS AND WALLS

71. All footings, foundations, walls and piers must be of sufficient dimensions and strength to carry and withstand any load or pressure to which they are likely to be subjected, having due regard to the conditions, strength and quality according to accepted standards of material used.

TIMBER IN WALLS

72. When brick walls are used for party or division walls in non-fireproof buildings the ends of joists and beams resting on walls shall be separated by at least four inches of brick, corbelled ledges provided if necessary.

DIVIDING WALLS IN SEMI-DETACHED DWELLINGS

73. Every non-fireproof semi-detached dwelling or terrace of dwellings must have fire resisting fare and aft partitions separating the different

sections from cellar to roof, without any communicating openings.

BEARING WALLS

74. Eight inch brick walls may be used for bearing walls in dwellings if clear space does not exceed twenty-six feet or the clear height does not exceed twelve feet. If these measures are exceeded, the thickness of walls shall be increased by four inches or posts, buttresses, or such other re-inforcing as the Inspector deems necessary.

BEAMS AND JOISTS

75. All walls shall be anchored to beams at each floor with sufficient iron or steel anchors.

ARCHES AND LINTELS

76. All openings in masonry walls shall have sufficient arches or lintels to withstand and carry the load for which the building is designed or used. Where wood lintels are used they shall be chamfered and have arches turned over lintel.

PARAPET WALLS

77. Parapet walls shall be not less than eight inches thick and coped and shall be carried not less than two feet above the roof.

HOLLOW BURNT CLAY BLOCKS

78. Hollow burnt clay blocks may be used if tied, bonded or otherwise re-inforced as in the opinion of the Inspector may be necessary according to the situation.

FURRED WALLS

79. In walls furred with wood the next course of brick above the order line of floor joists shall project the thickness of the furring beyond the inner line of the wall.

LIGHT AND VENT SHAFTS

80. The walls of all light and vent shafts twenty-five square feet or over in area in all buildings hereafter erected shall be of brick, not

low blocks or other fireproof material, and shall have metal frames with wired glass. Light, or vent shafts of a less area than twenty-five square feet may be built of wood studs with spaces filled with fire resisting material or covered with metal lath or plaster, but must have wired glass in windows. All light or vent shafts shall be covered with a ventilated skylight of metal and wired glass.

HOLLOW TILE OR BURNT CLAY BLOCKS

81. Where hollow tile blocks of hard burnt clay are used in bearing walls, the clear height between floors shall not exceed fifteen times the thickness of the wall. The maximum allowable thickness of tile walls shall be eight inches, and if more than one story shall be increased in proportion. Two courses of brick shall be provided at floor lines to form bearing for joists or stringers.

(2) Such other re-inforcing shall be provided as in the opinion of the Inspector is necessary according to the intended purpose of the building.

PART 2

WOOD FLOORS, BEAMS, GIRDERS, TRUSSES.

LOADS.

82. The floors of all buildings shall be designed and constructed so as to sustain the weight to which the proposed building is likely to be subjected. An architect or some other competent person shall calculate and furnish the owner or agent of every building with figures stating the load per square foot which may be safely placed on any floor or part thereof. Placards shall be conspicuously maintained in the different parts of every building on which the safe sustaining capacity shall be marked in plain figures. Load-

ing in excess of these figures shall be at owner's or agent's risk.

WOOD BEAMS

83. A rest of four inches shall be provided for the ends of wood beams in the wall or upon a post or girder according to the terms of this By-law, the ends of beams resting on brick shall be cut to a bevel of three inches and all spans of ten feet or more shall be bridged with cross bridging. The distance between any two lines of bridging shall not exceed eight feet.

BEAMS TO BE TRIMMED AWAY FROM FLUES

84. No wood beam shall rest in a chimney or air flue or be trimmed nearer than six inches to the inside of any smoke flue.

WOOD BEAMS AND GIRDERS

85. Ends of wood beams meeting on girders shall be strapped or anchored together in the same line of beams as are wall anchored. Each pier in walls running parallel with beams shall be anchored at each floor. All wood posts shall be squared at right angles with their axis. Wood post caps or bolsters shall not be allowed in buildings over one story in height.

PART 10.

BASEMENTS, VAULT AREAS AND SIDEWALK LIGHTS

WATER AND SEWER CONNECTION

86. Every building being constructed on property where water and sewer is provided shall be connected with the city sewer as soon as excavation is down to basement level. Should there be no sewer or should the basement level be below sewer or water level the accumulation of water

shall be prevented by pumping or other efficient means.

NO VAULT AREA

87. No vault area or other excavation shall be allowed under any street or sidewalk in connection with any building hereafter erected in the City.

PRISM LIGHT TAX

88. Where any part of any street, lane, sidewalk or other public place is occupied by any vault area or other excavation therein or thereunder a rental charge of five cents per square foot shall hereafter be collected for such part of the street, lane, sidewalk or other public place including vault walks as is occupied thereby. Such rental charge shall be payable in advance on the first day of January in each and every year commencing with the year 1924. This section shall come into effect on the first day of January, 1924 and the parts of by-laws now in force relating to the matters aforesaid shall then be and become repealed.

SHIPPING DOOR, COAL CHUTES, ETC.

89. No shipping or unloading door, ash door or coal chute communicating with the basement of any building shall hereafter be placed on any street, lane or sidewalk of the City of Edmonton if the lot is provided with a lane at the rear or side of the same.

PART II.

CHIMNEYS, FLUES, FURNACES, BOILERS, ETC.

FIREPLACES

90. All fire places and chimney breasts intended for ordinary fire place use shall have trimmer arches at least sixteen inches in width from the face of the chimney breast to support the hearth. The firebacks of all fire places hereafter erected

shall not be less than eight inches thick in brick unless a fireback of firebrick or its equivalent in other fireproof material is used.

FLUES

91. The flues of all chimneys shall be lined with burnt clay or terra cotta pipe. No pipe or funnel conveying steam, gas or hot air shall be fixed so as to discharge next to any public street or on the front of any building.

HIGH PRESSURE BOILER FLUES

92. All high pressure boiler flues shall be lined with firebrick laid in fire clay for a distance of not less than twenty-five feet from the source of heat.

HEATING PLANTS

93. Before the installation of any boiler, furnace or other heating apparatus, application for permission to install, giving full description of the premises and the proposed plant shall be made to the Inspector for approval, by the owner or contractor.

HOT AIR FURNACES

94. No person, firm or corporation shall, after the passing of this By-law engage in or work at the business of installing Hot Air Furnaces unless such person, firm or corporation shall first have obtained a license permitting him or them to do so.

95. No person shall receive a license to engage in or work at the business of installing Hot Air Furnaces unless he is of the full age of twenty-one years, has a place of business in the City, and presents evidence to the Inspector of his ability to install such work.

96. Every Licensed Installer of Hot Air Furnaces shall employ only skilled and qualified mechanics and shall not allow or permit any work to be done by or for him in connection with

installing any furnace except by such qualified mechanics and their apprentice working under them

97. In the case of a firm or corporation the License shall be issued to any one member of the firm or corporation or to the manager

98. The fee for every such license shall be the sum of five dollars, payable upon application to the Inspector of Licenses, and every such license shall expire on the 31st day of December of the year in which it is issued. Every such license shall be renewable upon payment of a fee of two dollars for each year it is renewed

99. Every applicant for a license to engage in the business of installing hot water furnaces shall, after making application to the Inspector of Licenses appear before the Inspector of Buildings, who shall examine the applicant concerning his qualifications and knowledge of the business and shall certify in writing to the Inspector of Licenses whether or not he finds the applicant well skilled in the business

100. In the event if the Inspector of Buildings certifies that the applicant is well skilled the said sum of five dollars shall be applied on his license fee but if he shall certify that the applicant is not well skilled the said sum shall be retained by the Inspector of Licenses and become part of the general revenue of the City

101. Licensees who neglect or refuse to complete any work without good reason or who are guilty of using any improper material or workmanship in connection with any installation shall be liable to have their license cancelled.

102. No furnace work shall be installed in connection with any building until an application to do so has been filed in the office of the Build-

ing Inspector on a form to be provided without any charge.

103. Repairs of a minor character may be made without such application being made but where repairs entail taking down the furnace and rebuilding same notice of such work shall be given to the Building Inspector.

104. The sum of one dollar (\$1.00) shall be paid with each application to cover the cost of inspection and entering records.

105. The Building Inspector shall be notified when any work is ready for inspection and all such work shall be left uncovered until it has been inspected. Such inspection shall be made within two working days after receipt of notice.

106. All pipes used for the distribution of hot air to buildings shall be made of sheet metal (tin-
ned) with airtight (seamed) joints.

107. Registers for both hot and cold air shall be placed in the walls of the rooms and no register shall be placed in a floor.

PART 12.

STAIRS, HAND-RAILS, ETC.

TWO OR MORE STAIRWAYS ON ALL BUILDINGS

108. Every building hereafter erected or remodelled and used or intended to be used for an office building, store, factory, hotel, lodging house or school, and having a floor area exceeding twenty five hundred square feet, shall have at least two continuous lines of stairs remote from each other, and an additional continuous line of stairs for each three to five thousand feet of floor area over two thousand five hundred square feet. Such stairway shall be of such width as in the opinion of the Inspector is necessary for safety.

but in no case shall it be less than three feet and six inches in clear width.

SPECIFICATIONS OF STAIRS

109. Stairs shall have not more than a sixteen risers without a landing. All stairs shall have treads of uniform width and risers of uniform height throughout each flight. Landings not forming a right angle turn shall be not less than thirty-three inches deep. Doors shall not swing so as to obstruct landings. All stairways shall have not less than seven feet clear head room. No circular or winding stairway shall be allowed in any building excepting a private dwelling.

HAND RAILS

110. All stairways shall have substantial and continuous hand rails alongside and also around well-holes. All stairways over five feet wide shall have continuous rails on both sides, and all stairways ten feet or over in width shall have a hand rail in the centre.

FIREPROOF STAIRS

111. In all buildings hereafter erected and used for colleges, schools, churches, hotels or apartments, the walls of staircase halls shall be of noncombustible material and fire stopped in each floor.

FIRE ESCAPES

112. Every building hereafter erected and being three stories or more in height shall have a sufficient number of emergency stairs or fire escapes of the stairway type, one at least of which must be accessible from all parts of the building without passing an open stairway or elevator shaft. All such emergency stairways must have adequate landings at the level of each floor with access thereto by a door not less than two feet wide to swing outward and not to in any way obstruct the way. Locking device shall be on

the inside. Red lights and notices shall be provided at exits on each floor, and emergency stairs or fire escapes must be within the property lines.

113. Any frame building of two or more stories in height equipped with means of egress satisfactory to the Inspector shall be deemed to comply with the requirements of this By-law.

PART 13

SKYLIGHTS, BULKHEADS AND CORNICES

114. Every opening in the roof of any building for the admission of light except over elevator and dumb waiter shafts and theatre stage roofs shall have a skylight with metal frames and wired glass, or of glass protected above and below with galvanized wire netting of not less than number twelve wire and not over one inch mesh.

CORNICES

115. All cornices on any building with walls of fire proof material shall also be of fire proof material.

SCUTTLES IN FLOOR OF STORE OR WAREHOUSE

116. Every building used as a store or warehouse shall have as many cast iron hose scuttles fixed in the floor as required by the Inspector.

TANKS

117. Tanks containing five hundred gallons or more when placed in any story or upon the roof of any building, shall be supported on iron or steel beams or girders and supports or on piers of masonry resting on permanent foundations. Such tanks shall be placed at one corner of the building and not over a line of stairs.

PART 14.
ELEVATORS

PASSENGER ELEVATORS

118. Every passenger elevator in any building hereafter built, remodelled or enlarged shall be placed in a fire proof shaft separate from the stair well and be provided with proper fire doors with locking device on the shaft side and all such elevators shall be provided with counter weights and sufficient approved safety devices, also automatic and limit stops all of which shall at all times be kept in proper running order

FREIGHT ELEVATORS

119. Every freight elevator must be provided with approved automatic doors at or in each floor through which the elevator passes, such doors to be so hung that they will at all times remain closed except when the elevator is passing each floor and every freight elevator must have its capacity marked in plain figures in a conspicuous place, and also a notice reading "PERSONS OTHER THAN THE OPERATOR RIDE ON THIS ELEVATOR AT THEIR OWN RISK."

DUMB WAITERS

120. All dumb waiters enclosures must be lined on the inside throughout with fire resisting material

121. All elevators shall be inspected by a competent inspector at least once in every twelve months and a certificate of such inspector certifying that the elevator is safe and in good running order shall be forwarded by the owner or his agent to the Building Inspector

OPERATOR TO BE 15 YEARS OF AGE

122. All passenger elevators unless operated

by automatic control shall be in charge of a competent operator not less than fifteen years of age.

PART 15.

FRAME BUILDINGS

STUDING IN FRAME BUILDINGS

123. The studing in outside walls carrying partitions of frame buildings shall be not less than two by four inches and if three stories in height studing shall not be less than two by six inches for the first story. All to be placed not more than sixteen inches on centres. All walls and cross partitions shall be angle braced.

JOISTS IN FRAME BUILDINGS

124. The joists in all frame buildings shall be of sound lumber of sufficient strength to sustain without deflection the intended load and shall be provided with sufficient bearing at each end, and shall be fire stopped over partitions and around stair walls, and shall be cross bridged every eight feet.

FIRE DAMAGE

125. No frame building within the first fire limits damaged by fire or other destructive agencies to the extent of fifty per cent or more of the value thereof shall be repaired or rebuilt except in conformity with the provisions of this by-law. No such building where damage is less than fifty per cent shall be increased in height or area by any repairs but nothing in this section shall prohibit the pulling of a stone or other substantial foundation under any building or prevent any one who may have a two story frame dwelling with a one story frame kitchen from adding a second story to such kitchen.

FIRE DAMAGE WHEN MORE THAN 20%

126. Any building within the first fire limits damaged by fire or other destructive agency to

a greater extent than fifty per cent of the value thereof shall be taken down and removed.

LIMITING FRAME BUILDINGS

127. No frame building shall be built to a greater height than three stories.

VENEERED BUILDINGS

128. A veneered building shall mean and include any frame structure the walls of which are covered above the foundation walls with brickwork or other incombustible material of not less than four inches in thickness, which in every case must be properly secured to the woodwork, such buildings shall not exceed thirty-five feet or three stories in height exclusive of foundations. Such buildings shall be treated in all other respects as frame buildings and if built nearer than two feet to the adjoining lot line or any other frame building, there shall be no windows or openings on any such side.

PART 16.

MILL CONSTRUCTION

129. No building of the Mill Construction type shall have a concealed air space.

SPECIFICATIONS—POSTS AND COLUMNS

130. Inside loads shall be properly supported upon a framing of wood posts, having girders, beams or joists sufficient to support their load. Wood posts shall not be less than eight inches in either cross diameter, except for posts in the top story which shall not be of smaller area than forty-eight inches nor of less than six inches in either dimension. All columns shall be squared at right angles to the axis.

CAST IRON OR STEEL CAPS

131. Wood posts shall have cast iron or steel caps or boxes so constructed as to form a base

for the next post above. The ends of the girder shall be secured to the cap or box in such a manner as to be self-releasing.

132. Cast iron columns and steel columns, girders and beams may be used if covered with fireproof material.

SPECIFICATION OF FLOORS

133. The lower floor may be of concrete if built directly upon the ground.

134. Wood floors shall be of plank not less than three inches in thickness, splined or tongued and grooved, covered with a wearing floor of boards not less than one inch thick laid in a crosswise or diagonal direction, tongued and grooved and properly nailed, or a laminated floor of not less than 2' x 4' material.

135. Roofs shall be boarded not less than one inch in thickness, tongued and grooved, or ship-lap.

PART 17

SKELTON CONSTRUCTION

SKELTON CONSTRUCTION

136. The term "skeleton construction" shall apply to buildings wherein all loads and strains are transmitted to the foundation by a frame work of metal, their different parts being riveted to each other, and all beams and girders having riveted connections with the columns. Where the use of rivets is not practicable or in the opinion of the Inspector not necessary, bolts may be used.

COVERING OF SKELTON CONSTRUCTION

137. All such metallic construction shall be protected against fire by being entirely covered with fireproof material of not less than four

inches in thickness on columns or less than two inches on flange of beams.

INDEPENDENT OF ADJOINING BUILDING

138. The steel frame of a building shall be independent of an adjoining building unless built at the same time.

139. Before a permit is granted for a building in which steel is used to carry the load the designing engineer shall forward to the Inspector with the application a certificate certifying that the building is properly designed to carry stated loads. He shall also state the factor of safety allowed in all his calculations.

PART 18.

FIREPROOF CONSTRUCTION

140. All buildings of Fireproof Construction shall mean and include all buildings in which all parts that carry weight or resist strains including roof construction, and all stairs and stair ways and elevator enclosures are of incombustible materials, and in which all metallic structural members are protected by a sufficient fireproof covering securely fastened to the metal with wire or metal clips.

PART 19.

RE INFORCED CONCRETE CONSTRUCTION

141. In concrete or re-inforced concrete construction walls, floors and piers shall be calculated and constructed and proportioned according to standard practice, the concrete shall be mixed sufficiently wet to fill all voids within the forms as soon as possible after mixing, and in

no case shall cement be used after it has been wet more than one hour.

The forms for column posts, beams and girders shall be built in conjunction with the forms for the floor slabs which they support and no forms shall be removed until all parts of such respective columns, beams, or floors are strong enough to support themselves and any load that may come upon them during construction.

PART 20.

APARTMENT AND TENEMENT HOUSES

APARTMENT OR TENEMENT

142. An apartment house or tenement house shall mean a building or part thereof which is arranged so as to be occupied by three or more families living independently of each other.

OUTSIDE LIGHT IN EACH ROOM

143. Every apartment house or tenement house shall have an outside light in all rooms, and each and every apartment must be accessible from a public hallway which shall at all times be kept well and sufficiently lighted. There shall be a ventilating skylight over every stairway there shall be direct access from the hallway to at least two stairways placed so that either is accessible without having to pass the other.

LIVING ROOM IN BASEMENT

144. Rooms or apartments in basement shall have at least three feet and six inches clear between surface of ground and ceiling of rooms, and floors and underground portions of walls shall be waterproof and damp-proof.

LAVATORY ACCOMMODATION

145. There shall be a separate water closet in a separate compartment within each apartment, or when apartments consist of one or two rooms

there shall be at least one water closet for each four rooms. Lodging or rooming houses shall be provided with as many water closets for each sex as the Inspector or Board of Health may require, but shall not be less than one for every fifteen occupants. Hotels and such buildings as may supply transient accommodation shall have a general lavatory with adequate water closets in addition to the requirements of this section. All water closets must be provided with sufficient means of ventilating the same both day and night.

FIREPROOF APARTMENTS

146. All apartment house or tenement house buildings four or more stories in height shall be of fireproof construction. When rooms in office buildings are used for living rooms the provisions of this section shall apply.

PART 21

PUBLIC BUILDINGS, THEATRES AND PLACES OF AMUSEMENT

DEFINITIONS

147. For the purpose of the following thirty sections, viz., Sections 148 to 177, both numbers inclusive, the word public building shall include churches, chapels, seminaries, colleges, convents, schools, hospitals, asylums, hotels, theatres, libraries, halls, concert rooms, and all other places used or intended to be used for public assemblage.

REGULATIONS AS TO GATES AND DOORS

148. When a building is in use by the public the doors or gates in the corridors shall be kept unfastened, at other times they may be closed and fastened by movable bolts or latches. Open courts or corridors in or about the courts shall

not be used for storage purposes nor for any purpose whatever except as an entrance or exit and must be kept free and clear during performances.

STAIRS AND STAIRWAYS

149. In every public building stairs from balconies and galleries shall not communicate with the basement or cellar, and all stairs shall have treads of uniform width and risers of uniform height throughout each flight. No stairway from any gallery shall be less than four feet in width between handrails.

STAIRCASES IN PUBLIC BUILDINGS

150. In every theatre or public building having a hall for public assemblage the staircases for the use of audience shall be enclosed with walls of fireproof materials and in the stories through which they pass, the opening to the said staircases from each tier shall be the full width of the staircase. No door shall open immediately upon a flight of stairs, but a landing at least the width of the door shall be provided between such stairs and such door.

SEAT SPACING

151. In every theatre or public building having a hall for public assemblage all seats in the auditorium excepting those contained in boxes shall be not less than thirty-two inches from back to back, measured in a horizontal direction, and firmly secured to the floor and so arranged that not more than six seats shall intervene between any seat and the aisle, on either side.

EXITS

152. In every theatre or public building having a hall for public assemblage public doorways or exits (except fire escape exits) shall be not less than five feet in width and for every additional one hundred persons or fraction thereof in ex-

cris of five hundred for which accommodation is provided an aggregate of twenty inches additional exit width must be provided, and all doors of exit or entrance shall open outwardly in such a manner as not to become an obstruction in any passage or corridor, and no doors shall be closed and fastened when the building is opened to the public.

EXIT

153. Every theatre shall have at least three exits with a free passage way from each exit to a street, and every such public building hereafter erected shall have an exit on at least three sides for the main floor of such building, with a free passage way from each exit to the street and shall also have an exit, independent from the main floor exits, from every gallery leading either to the passage way or to a street.

WIDTHS OF PASSAGE WAY

154. Passage ways shall be provided in every theatre of at least the following widths—

Where the seating capacity does not exceed six hundred	Six feet wide.
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Between six hundred and one thousand	Seven feet wide.
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Between one thousand and eighteen hundred	Eight feet wide.
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Exceeding eighteen hundred	Ten feet wide.
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STORAGE ROOM.—STAGE SEPARATED IN INCOMBUSTIBLE MATERIAL.

155. In any theatre no workshop, storage, or general property room shall be allowed above the auditorium or stage, or under the same, or in any of the fly galleries, unless all such rooms or shops are located in the rear of, or at the side of the stage, and in such cases they shall be separated from the stage by a wall of incombustible

material, and the openings leading into said portions shall have self-closing standard fire doors.

RESTRICTION OF USE

155. No portion of any theatre hereafter erected or altered shall be occupied or used as a hotel, boarding or lodging house, factory, workshop or manufactory or for storage purposes except as provided for.

No store or room contained in any theatre shall be let or used for carrying on any business dealing in any article or material dangerous to life.

No lodging accommodation shall be allowed in any part of such theatre communicating with the auditorium.

AUDITORIUM SEPARATE

157. The auditorium in every theatre shall be separated from the entrance vestibule and from any room or rooms over the same and from any lobbies or corridors, by a wall of fireproof material. The doors shall be made to close automatically and be of standard pattern and make.

158. In every theatre having a stage a fire wall of fireproof material not less than twelve inches thick shall separate the auditorium from the stage and shall extend four feet above stage or auditorium roof.

FIRE-PROOF METAL CURTAIN

159. In every theatre the proscenium opening shall be provided with a fireproof metal curtain or a curtain of asbestos or other fireproof material, overlapping the brick proscenium wall at each side not less than twelve inches, and sliding vertically at each side within iron grooves or channels to be securely bolted to the brick wall extended to a height of not less than three feet above the top of the curtain when raised to its full lift. Said curtains shall be suspended or hung by steel cables passing over wrought iron

or steel sheaves supported by wrought iron brackets of sufficient strength and well braced, the brackets to be securely attached to the proscenium wall by through bolts with nuts and washers on the opposite side of the wall. Said fireproof curtain shall be raised at the commencement of each performance and lowered at the close of the said performance, and be operated by approved machinery for that purpose. If the proscenium curtain be of asbestos, the material shall be reinforced with wire or wires spun in asbestos, and at the bottom of the curtain shall be placed a rigid metallic rod or bar of proper weight, securely fastened to the curtain and covered over with like material as the curtain itself, to carry down the curtain by the weight of the said rod or bar when released. The excess of weight of the curtain is to be overcome by a check rope of cotton or hemp extending to the floor on both sides of the stage so that the cutting or burning of it will release the curtain and cause it to descend at its normal rate of speed. The proscenium curtain shall be placed so that its nearest part shall be at least three feet distant from the footlights.

160. In every theatre there shall be no doorway or opening through the proscenium wall from the auditorium, above the level of the first floor and openings on or below the first floor shall have self-closing fire doors.

VENTILATORS

161. In every theatre there shall be one or more ventilators constructed of metal or other incombustible material near the centre above the highest part of the stage extending at least ten feet above the stage roof and of a combined area equal to at least twelve per centum of the area within the stage walls. The openings in every such ventilator shall be closed by valves,

louvers, or dampers, so counterbalanced as to open automatically, held closed by hempen or cotton cord, in which shall be inserted a fusible link at such a point as to be near the bottom of the ventilator and such cord shall be fastened at the stage floor level near the prompter's desk, and so arranged that it can be easily reached and severed in case of necessity.

CONSTRUCTION OF STAGE

162. All that portion of the stage not comprised in the workings of scenery, traps, and other mechanical apparatus, for the presentation of the scene usually equal to the width of the proscenium opening shall be built of iron or steel beams filled in between with fireproof material and all girders for the support of said beams shall be of wrought iron or rolled steel.

HIDING LOFT MUST BE ETC., OF NON-COMBUSTIBLE MATERIAL.

163. In every theatre the gridiron or rigging loft shall have a lattice iron door and be readily accessible by iron stairways. All stage scenery curtains and decorations made of combustible material and all wood work on or about the stage shall be painted or saturated with some non combustible material or otherwise rendered safe against fire.

AUDITORIUM CONSTRUCTED FIREPROOF

164. In every theatre the roof over the auditorium, the entire main floor of the auditorium and vestibule, the entire superstructure over the entrance, lobby and corridors, and all galleries and supports for the same in the auditorium shall be constructed of iron or steel or fireproof materials not excluding the use of wood floor boards and necessary sleepers to fasten the same to, but such sleepers shall not bear timbers of support, and the space between the sleepers (except the por-

tion under the stepping in the galleries, which shall be properly fire-stopped) shall be solidly filled with incombustible material up to the underside of the floorboards.

GALLERIES

165. In every theatre the fronts of each gallery shall be entirely formed of fireproof materials, except the capping, which may be of wood.

166. In every theatre the ceiling under each gallery and auditorium shall be entirely formed of fireproof material and all lathing whenever used shall be of wire or other metal on metal studding.

FIREPROOF MATERIALS AND PROTECTIVES

167. In every theatre the partitions in that portion of the building which contains the auditorium, the entrance and vestibule and every room and passage used by the public shall be constructed of fireproof materials, including the lathing on outside of other walls. None of the walls or ceilings shall be covered with wood sheathing, wood wainscoting, canvas or any combustible material providing this shall not preclude the construction of wood sounding board over orchestra pit when same extends back of and below the overhanging of the stage. Actors' dressing rooms shall not be placed on the stage, the fly galleries or under the auditorium, but shall be placed in a separate section provided for that purpose.

168. In every theatre the platform or risers formed to receive the seats shall not be more than twenty-four inches in height of rise nor less than thirty-two inches in width of platform.

WIDTH OF AISLES

169. In every theatre all aisles on the respective floors in the main house, having seats on both sides of same shall not be less than three

feet wide where they begin, and shall be increased in width towards the exits in the ratio of one and one-half inches to five running feet.

Aisles having seats on one side only, shall not be less than two feet six inches wide at their beginning, and increased in width the same as aisles having seats on both sides.

FOYERS, LOBBIES, ETC.

170. Every theatre shall have an aggregate capacity of foyers, lobbies, corridors and passages, for the use of the audience sufficient to contain the entire number to be accommodated on said floor or gallery in the ratio of one hundred and fifty superficial feet of floor room for every one hundred persons.

171. In every theatre gradients or inclined planes shall be used in place of steps in the aisles, corridors and passages.

TWO INDEPENDENT STAIRWAYS WHERE THE CAPACITY EXCEEDS ONE THOUSAND

172. In every theatre where the seating capacity is for more than one thousand people, there shall be at least two independent staircases with direct exterior outlets provided for each gallery in the auditorium, where there are not more than two galleries, the stairs shall be located on opposite sides of said galleries. Where there are more than two galleries, one or more additional staircases shall be provided, the outlets from which shall communicate directly with the principal exit or other exterior outlets. All said staircases shall be of width proportioned to the gallery accommodation as elsewhere herein prescribed. Where the seating capacity is for one thousand people or less, two direct lines of staircases only shall be required, located on opposite sides of the galleries, and in both cases shall extend from the side walk level to the upper gallery

with outlets from each gallery to each of the said staircases and at least two independent direct exterior outlets shall be provided for the service of the stage and shall be located on the opposite sides of the same.

STAND PIPES AND FIRE APPLIANCES

173. In every theatre stand pipes of not less than two and a half inches diameter shall be provided with hose connections as follows:

One on each side of the auditorium in each tier, one on each side of the stage, one within ten feet of the doors of the property room, one within ten feet of the door of the carpenter's shop and scenery storage room, all of which shall be kept clear of obstructions, the thread of all connections shall be uniform with that in use by the Fire Department of this City, and two spanners shall be located at each hose connection, the pipes shall be kept constantly filled with water under pressure and be ready for immediate use at all times.

A sufficient quantity of approved lines, hose not less than two and one-half inches in diameter in fifty foot lengths, shall be kept attached to each hose connection and be equipped with washers, couplings and nozzles, and there shall be kept in readiness for immediate use one forty gallon cask filled with water and six fire pails on each side of the stage and on each fly gallery, and a supply of fire pails in property and other store rooms, and work shops painted red and lettered "FOR FIRE PURPOSES ONLY."

174. In every theatre hereafter erected a system of standard automatic sprinklers supplied by an independent water service shall be installed throughout the entire stage section.

175. The exit of every theatre shall have over the same an iron inside, the word "EXIT" painted in legible letters not less than six inches high.

MOVING PICTURE THEATRES

176. Every building used as a moving picture house and not having a stage shall comply with all the provisions of this by-law regarding theatres except the provisions relating to a stage and proscenium, and every such building having a stage shall comply with all the provisions of this By-law relating to theatres.

177. The operating booth shall be fireproof and vented and shall be placed where it will not interfere with the proper and ample exit of the spectators.

PART II

PUBLIC STABLES

PUBLIC STABLES

178. Public stables, according to the terms of this By-law, shall mean and include any stable where eight or more animals are housed.

PERMIT

179. No permit shall be issued to erect or alter a building intended to house eight or more animals unless authorized by the Council of the City.

DRAINAGE

180. All public stables shall have water-tight floors. Stall floors shall drain into gutters all graded and connected to a trap catch basin and from catch basin to public sewer. Receptacles shall be provided for manure, the contents of which must be removed in accordance with the regulations of the Health Department.

YARDS

181. Stable yards where animals are allowed to run loose must be enclosed with a tight board

fence not less than eight feet high. All accumulation of manure or other waste matter must be removed in accordance with the regulations of the Health Department.

FIRE PROTECTION AND EXITS

182. There shall be sufficient fire protection in all public stables, consisting of fire hose connected with the city water system or a sufficient number of approved chemical fire extinguishers. All public stables shall have at least two exits not less than five feet in width and as remote as possible from each other.

PRIVATE STABLES

183. No private stable in which horses or cows are kept shall be built within 75 feet of the street on which the lot fronts.

PART 23.

GARAGES

PUBLIC GARAGES

184. A public garage within the meaning of this By-law is a building used for the storage or repair of motor vehicles for public use. No part of such garage shall be used for any other purpose unless separated therefrom by fireproof walls, floors and ceilings. All such buildings shall have outside walls of brick or other fireproof material and if two or more stories in height shall have re-inforced or laminated floors and shall be heated by steam and shall be ventilated as in the opinion of the Inspector may be necessary.

PRIVATE GARAGES

185. Private garages to house not more than two automobiles may if built entirely of steel or other fireproof material, be placed on rear of inside lots within the First Fire Limits but not

more than one such garage shall be placed on any one lot. Private garages, if attached to a dwelling shall be separated therefrom by a wall of noncombustible material and any openings in such wall shall be provided with fire doors with a self closing device and shall not be heated directly by stoves.

LUMBER OR WOOD YARDS WITHIN FIRST FIRE LIMITS

186. No person shall establish a lumber or wood yard within the first fire limits.

187. No lumber or wood in any wood or lumber yard shall be piled within a distance of at least ten feet from any frame building in the vicinity of any such wood or lumber yard, and (1) wood and lumber yards shall have roadways passing from front to rear at least twelve feet wide and not more than fifty feet apart. Lumber piles shall not exceed sixteen feet in height and wood piles shall not exceed twelve feet in height unless permission to exceed such height shall have been obtained from the City Commissioners.

FIRE SHUTTERS

188. Whenever any building shall be provided with exterior shutters above the first story, such shutters shall be securely fastened to the building and so hung as to be readily opened or closed either from the inside or from the outside, and all fire doors and shutters to openings on the first floor shall be securely hung, and at least one of such fire doors or shutters on each side, and front and rear shall be so fastened that it can be opened from the outside by firemen.

PART 24

PREMISES USED FOR DRY CLEANING
BUSINESS

DRY CLEANING BUSINESS

189. Every building hereafter erected or altered and intended to be used as a dry cleaning establishment, where gasoline or benzine is used, shall be as nearly fireproof as possible. It shall not have floors of wood, it shall have sufficient vent holes at or near the ceiling. It shall be heated by steam or hot water and shall be lighted by electricity, and have an approved trap in sewer connection.

PART 25

TUNNELS UNDER AND BRIDGES OVER LANES

TUNNELS AND BRIDGES

190. Every person desiring to use space under or over any street or lane in the City by way of a tunnel under or a bridge over the same shall make application in writing to the City Commissioners and shall submit with such application plans in detail. The Commissioners shall refer the said plans to the Inspector of Buildings and to the City Engineer for their inspection. If the Commissioners approve of the work they shall issue a permit authorizing the applicant to proceed with the work in accordance with the plans and specifications as approved by them. No such permit will be issued by the Commissioners until the applicant has entered into an agreement satisfactory to the said Commissioners in every way safeguarding the rights of the City and the public, including a good and sufficient indemnity to the City against all actions, proceedings, losses, damages, charges, claims and demands arising out of or by reason or on ac-

count of anything done or omitted to be done by the applicant in respect of the proposed work. Every such tunnel, or bridge shall be of fireproof construction throughout and shall at all times be kept free from any obstruction or inflammable material and shall be lighted by electricity only. Access shall be given to the authorized agents of the City at all reasonable times to inspect every such work and the maintenance thereof.

PART 20

REGULATING BILLBOARDS, SIGNS, SIGN-BOARDS AND ROOF SIGNS

PERMIT

191. No billboard, signboard, sign or advertising device one hundred square feet in area shall be erected, moved or altered in any part of the City unless a permit has first been obtained from the Building Inspector.

APPLICATION

192. All applications for the erection, enlarging, or removal of a billboard, signboard, sign, or advertising device, shall be accompanied by the written consent of the owner of the property, and full particulars of the construction, ownership and advertising.

FEES

193. A fee of fifty cents shall be paid to the Inspector for the issuing of a permit for billboards, signboards, signs, or advertising device, over one hundred square feet in area, and a further annual inspection fee of fifty cents for each location.

BOND REQUIRED

194. Any person or firm engaged in the business or occupation of erecting or removing billboards, signboards, signs, or advertising devices

shall execute and file with the City a bond with sufficient sureties to the satisfaction of the City Commissioners in a sum of not less than \$1000.00 conditioned to indemnify and hold the City harmless from all damages to persons or property that may result from the erection or maintenance thereof.

HEIGHT AND DISTANCE FROM STREET

195. No billboard or signboard shall hereafter be erected of a greater height than fourteen feet, except in the case of double decker boards (painted advertisements only on upper deck) which may be twenty-five feet high. There shall be a clear space of two feet and six inches from the ground surface to base of billboard or signboards. All billboards or signboards over six feet in height must be set back from the property line a distance of at least equal to the height of the board. Owner's name shall be placed and maintained on top of all billboards and signboards.

CONSTRUCTION OF BILLBOARDS AND PROJECTION OF SIGNS

196. Billboards and signs shall be of incombustible material except that the string pieces, uprights and braces for billboards may be of wood. Hanging or suspended signs shall not project more than four feet and six inches over sidewalk or other public property. There shall be a clear space of not less than twelve feet from surface of sidewalk to the lowest part of any hanging or suspended sign. No sign or advertising device shall be placed in a manner that will interfere with access to or from a building, or interfere with the members of the Fire Department in the performance of their duties.

BILLBOARDS IN OR NEAR PARKS

187. No billboard or sign shall be allowed upon any public park (other than signs regarding the same) nor upon any property overlooking the river, or within two hundred feet of any part of the banks of any ravines within the City.

POSTING SIGNS ON FENCES, TREES, ETC.

188. No signs or advertising device shall be posted or otherwise fastened, other than notices concerning the property itself (and then only as may be approved) on fences, trees or buildings within the City—and all such signs are absolutely prohibited on telephone or electric light poles. Any signs placed in contravention of this section may be removed without notice. No sign or advertisement shall be placed on any fence or covered wall permitted in front of any building during construction or repair other than the names of architect, contractor, supply men and recent or prospective tenants, and in such forms as approved by the Inspector.

CIRCUS POSTERS AND CLOTH SIGNS

189. All signs or advertising matter of any kind which may be placed anywhere in the City advertising circuses or other travelling shows must be taken down or removed by the parties responsible or their agents within forty-eight hours after such circus or show has ceased to exhibit in the City. A guarantee deposit in the sum of \$25.00 shall be placed with the Building Inspector to the effect that such advertising shall be removed in accordance with the provisions of this section. In default of removal within the specified time the Inspector shall cause the same to be removed defraying the expense thereof out of the deposit and shall return any balance to the depositor.

200. Temporary signs of cloth, wood or other material shall not exceed six feet in depth and may extend across the entire front of a building provided such sign is placed flat against the wall (and securely fastened thereto) of the building in which the business or other trial is being conducted. Not more than one such sign shall be displayed on any given premises at any given time. Each such sign shall be removed within fifteen days from the time of its erection, and shall bear the date for its removal in figures which may be easily seen from the sidewalk.

201. Sign writers shall make a monthly declaration to the Inspector (on forms supplied) of signs erected by them during the preceding month and shall pay a fee of fifty cents (50c) for each sign of one hundred square feet or over erected.

202. No cotton or cloth sign banners or announcements shall be strung or placed across any street within the City along which trolley or other high tension wires are placed nor shall any such sign or banner be strung across any other street without a permit in writing being first obtained from the Inspector and approved by the City Commissioners.

ILLUMINATED ROOF AND PROJECTING SIGNS

203. Electrically illuminated roof signs over one hundred square feet in area and all illuminated projecting signs shall be of steel skeleton construction and the framework thereof shall be entirely of metal or other equally incombustible material and shall be securely anchored and fastened to roof or wall upon or to which any such sign is erected or attached. Roof signs shall not be placed on the roof of any building over two stories in height unless the building is of fireproof construction. Any sign resting upon the cornice or the top of the front wall of a building

shall be of metal mending braces and supports. Illuminated projecting signs shall not project more than seven feet and six inches over a public street or sidewalk and must have a clear space of not less than twelve feet from the lowest part of the sign to sidewalk or other surface level. This section shall not apply to signs illuminated by reflected light.

APPLICATION, PERMIT AND FEES

204. No such sign as outlined in the preceding section shall be erected until applicant or its writing has been made to the Inspector giving full particulars, including owner, location, construction and size. If the Inspector is of the opinion that the proposed construction is in accordance with the terms of this By-law he shall thereupon issue a permit and collect a fee therefor of one dollar (\$1.00) for each sign of one hundred square feet or over.

ELECTRICAL WIRING AND INSPECTION

205. No illuminated sign shall be erected until the plans therefor have been submitted to the City Electrician and his approval and permission obtained. All wiring and installation in connection therewith shall be carried out under his supervision and inspection.

BONDS REQUIRED

206. No permit shall be issued for the erection of any such sign as hereinbefore described until the applicant or owner shall have filed with the City a bond in the sum of One Thousand dollars (\$1,000.00) with sufficient sureties to the approval of the City Commissioners to indemnify and hold the City harmless against all damages by reason of or arising out of the construction or maintenance thereof.

FENCES

207. No person shall hereafter erect any fence which is over three feet in height, on or near any street, avenue or lane line until he has first submitted to the Inspector particulars or specifications thereof and received a permit from the Inspector authorizing the erection thereof. If in the opinion of the Inspector the fence when erected will be improperly constructed or likely to be or become dangerous to the public he shall refuse the permit.

REPEAL

208. By-law No. 21, 1917, and all amendments thereto, Sections 1, 4, 5, 6, 7, 13, 16, 18, 19, 23, 25 and 27 of By-law No. 23, 1917, and amendments thereto and all By-laws or parts of By-laws inconsistent with the provisions of this By-law are hereby repealed.

Read a first time this 11th day of June, 1923.

Read a second time this 8th day of October, 1923.

Read a third time and passed this 11th day of October, 1923.

(Signed)

D. M. BROWN,

Mayor.

CHAS. H. K. COX,

City Clerk.

(REAL)

BY-LAW No. 35, 1923

A By-law to prescribe the space to be left vacant about buildings, to limit the number and nature of buildings to be erected on any lot or parcel of land within certain parts of the City of Edmonton and to declare certain streets or parts thereof to be residential streets and to prescribe the distance from the line of the street in front of and at the side of it at which no building on a residential street may be placed or erected.

The Municipal Council of the City of Edmonton, duly assembled, enacts as follows:

1 From and after the passing of this By-law no apartment or tenement house, that is to say, a building or part of a building which is so arranged as to be occupied by three or more families living independently of each other—erected on any lot or parcel of land within the City and used or intended to be used for human habitation shall occupy more than seventy-five per cent of the lot or parcel of land upon which it is erected provided always that when an apartment or tenement house is so built that it is used in part for business purposes, the ground floor thereof may cover the entire area of the lot or parcel of land upon which it is erected if the whole of such floor is used for stores or sales-room purposes only, but above the first storey only eighty per cent of the area shall be occupied by the building, the balance of twenty per cent shall be left free from obstruc-

tion so as to secure free circulation of air and access of proper light.

2. Every such building shall be so constructed as to provide light and ventilation directly from the outside for every room therein but this restriction shall not apply to the ground floor if the same is used or intended to be used as a shop or for other business purposes.

3. From and after the passing of this By-law, no detached or semi-detached residence used or intended to be used for human habitation shall be erected placed upon or moved to or upon any lot or parcel of land within the City of Edmonton unless such lot or parcel of land has an area of not less than three thousand square feet exclusive of any allowance for lane provided always that where any lot or parcel of land is of a less area and has been laid out and the plan thereof has been registered in the Land Titles Office for the North Alberta Land Registration District or where any such lot or parcel of land abuts upon two streets or where by reason of the irregularity of survey or other good or sufficient cause the Council may by resolution declare in any such special case that this provision shall not be applicable to any particular lot or parcel of land.

4. For the purposes of this section the term "terrace" shall mean and include any building or series of buildings under the same roof divided into separate residences having a separate entrance door from the outside.

(2) From and after the passing of this By-law no terrace shall be erected, placed upon or moved to or upon any lot or parcel of land within the City of Edmonton unless each separate residence therein shall be situated upon a parcel of ground

having an area of not less than sixteen hundred square feet.

(3) No such separate residence shall occupy more than fifty per centum of the plot or parcel of ground adjoined to or to be enjoyed therewith.

2. A full clear space of at least two feet shall be left between the side property lines and the outside walls of every frame building (as from time to time defined in the Building By-laws of the City) hereafter erected on the City of Edmonton unless the walls next said property line are veneered with brick or other incombustible material not less than eight inches thick throughout the full length of such wall or unless a wall of masonry not less than eight inches thick and the full length and height of the building is built at or near the said property line.

3. All streets and avenues and parts of streets and avenues within the City of Edmonton except those set out in the schedule hereto annexed and marked "A" which schedule is incorporated into and which part of it a By-law are hereby declared to be residential streets.

4. From and after the passing of this By-law no building shall be erected or placed upon any lot or parcel of land in front of which lot or parcel of land there is a residential street unless the front wall of such building is situated at a distance of at least twenty feet from the line of the fronting residential street.

(2) In the case of any new building erected on any lot or parcel of land fronting on any residential street the front wall of the new building may be situated at a less distance than twenty feet from the street line if it be between two existing buildings in the same block but the front wall thereof shall not be nearer to the street line than the front wall of the existing building which is

nearest to the street line, and in case the new building be erected on a corner lot, the front wall may conform to the front line of the nearest existing building. (3) In the case of any new building being erected on a corner lot it shall, except as set out in subsection (2) of this section, have its wall on the narrow side of the lot not less than twenty feet from the street line of the front of the lot and its side wall not less than five feet from the street line of the flankage or long side of the lot.

8. From and after the passing of this By-law no shop or store building, laundry building, public stable, public cow shed, public garage, factory, warehouse or any building used or intended to be used for business or trade shall be erected upon any lot or parcel of land fronting upon any residential street. Provided always that in any special case the Council may for any good and sufficient reason by resolution declare that this provision shall not be applicable to any particular lot or parcel of land.

9. Any person erecting or placing any building or doing any act in contravention of any of the provisions of this By-law shall be guilty of a breach of this By-law.

DONE and PASSED in Council this twenty sixth day of November, A.D. 1923.

(Signed)

D. M. DUGGAN,

Mayor.

CHAS. ED. K. COX,

City Clerk.

(Seal)

WILLIAMS & LEITCHES NO 35, 1923.

Streets and Parts of Streets and Water Main
 Streets as Indicated on Said Plan

North Side of the North Saskatchewan River

1st Street	2nd Street	3rd Street	4th Street	5th Street	6th Street	7th Street	8th Street	9th Street	10th Street	11th Street	12th Street	13th Street	14th Street	15th Street	16th Street	17th Street	18th Street	19th Street	20th Street	21st Street	22nd Street	23rd Street	24th Street	25th Street	26th Street	27th Street	28th Street	29th Street	30th Street	31st Street	32nd Street	33rd Street	34th Street	35th Street	36th Street	37th Street	38th Street	39th Street	40th Street	41st Street	42nd Street	43rd Street	44th Street	45th Street	46th Street	47th Street	48th Street	49th Street	50th Street	51st Street	52nd Street	53rd Street	54th Street	55th Street	56th Street	57th Street	58th Street	59th Street	60th Street	61st Street	62nd Street	63rd Street	64th Street	65th Street	66th Street	67th Street	68th Street	69th Street	70th Street	71st Street	72nd Street	73rd Street	74th Street	75th Street	76th Street	77th Street	78th Street	79th Street	80th Street	81st Street	82nd Street	83rd Street	84th Street	85th Street	86th Street	87th Street	88th Street	89th Street	90th Street	91st Street	92nd Street	93rd Street	94th Street	95th Street	96th Street	97th Street	98th Street	99th Street	100th Street
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1st Avenue 11th Street to 12th Street

South Side of the North Saskatchewan River

1st Street 11th Avenue to River

1st Street	2nd Street	3rd Street	4th Street	5th Street	6th Street	7th Street	8th Street	9th Street	10th Street	11th Street	12th Street	13th Street	14th Street	15th Street	16th Street	17th Street	18th Street	19th Street	20th Street	21st Street	22nd Street	23rd Street	24th Street	25th Street	26th Street	27th Street	28th Street	29th Street	30th Street	31st Street	32nd Street	33rd Street	34th Street	35th Street	36th Street	37th Street	38th Street	39th Street	40th Street	41st Street	42nd Street	43rd Street	44th Street	45th Street	46th Street	47th Street	48th Street	49th Street	50th Street	51st Street	52nd Street	53rd Street	54th Street	55th Street	56th Street	57th Street	58th Street	59th Street	60th Street	61st Street	62nd Street	63rd Street	64th Street	65th Street	66th Street	67th Street	68th Street	69th Street	70th Street	71st Street	72nd Street	73rd Street	74th Street	75th Street	76th Street	77th Street	78th Street	79th Street	80th Street	81st Street	82nd Street	83rd Street	84th Street	85th Street	86th Street	87th Street	88th Street	89th Street	90th Street	91st Street	92nd Street	93rd Street	94th Street	95th Street	96th Street	97th Street	98th Street	99th Street	100th Street
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BY-LAW No. 47, 1923

A By-law to further amend By-law No. 25, 1917,
(Licensing By-law)

The Municipal Council of the City of Edmonton, duly assembled, enacts as follows

By law No. 25, 1917, entitled "A By-law to provide for the Licensing and Registering of certain Businesses and Occupations," is hereby amended as follows

1 By inserting after Section 8 the following sections

8. (a) Upon receipt of an application for a license to carry on the business of a laundry and for a transfer thereof, the Inspector of Licenses shall notify the Medical Officer of Health of the application.

(2) Upon receipt of such notice the Medical Officer of Health shall inspect or cause to be inspected the premises wherein the laundry is proposed to be carried on with a view to ascertain if the said premises and appliances are sanitary and fit for the purposes of a laundry and comply with the by-laws of the City and the regulations of the Provincial Board of Health and shall within four days report to the Inspector.

(3) No such license shall be issued unless and until the Medical Officer of Health reports that the premises are sanitary and fit for the purposes of a laundry and comply with said by-laws and regulations.

8 (b) Upon receipt of an application for a license to carry on the business of a public board

ing or lodging house keeper or for a transfer thereof, the Inspector of Licenses shall notify the Medical Officer of Health and the Inspector of Buildings of the application.

(2) Upon receipt of such notice the Medical Officer of Health shall inspect or cause to be inspected the premises wherein the applicant proposes to carry on his business with a view to ascertain if the said premises are in a sanitary condition, free from vermin and supplied with the sewage services required by the by laws of the City otherwise required by law and shall within four days report to the Inspector.

(3) Upon receipt of such notice the Inspector of Buildings shall inspect such premises with a view to ascertain if they are equipped with the required fire escapes and in other respects are in accordance with the by laws of the City relating to the safety of buildings.

(4) No such license shall be issued unless and until the Medical Officer of Health reports that the premises are in a sanitary condition free from vermin and supplied with sewage services as aforesaid and the Building Inspector reports that such premises are equipped with the required fire escapes and in other respects are in accordance with the by laws of the City relating to the safety of buildings.

41 By inserting therein after Section 41 the following section:

DEFINITIONS

41a. (1) For the purposes of this section "Master" shall mean any person firm or corporation conducting or maintaining a shop for carrying on the business of sanitary plumbing, gas and steam fitting or any one or more of them, and "Journey men" or "Operative" shall mean any

workman engaged by or working for or with a "Master "

LICENSE.

(12). No person or firm or corporation shall, after the passing of this By-law engage in or work at the business of sanitary plumbing, steam or gas fitting unless such person, firm, or corporation shall first have obtained a license authorizing him or them to do so, either from the City or the Provincial Board of Health.

FIRM OR CORPORATION

(13). In the case of a firm or corporation the license shall be issued to any one member of the firm or in the case of a corporation, to the manager thereof or in accordance with the regulations of the Provincial Board of Health, if any member of the firm or the manager of a corporation wishes to engage in actively installing or repairing plumbing fixtures or steam or gas fitting he shall first obtain a license as provided for apprentice and journey men plumbers or gas and steam fitters.

(14). A Master's license may be a combined license covering plumbing gas and steam fitting or any one or more of them. No person, firm or corporation shall receive a Master's license unless the applicant is of the full age of twenty one years and he or his firm or the corporation on whose behalf he is applying has a place of business within the City of Edmonton nor unless he furnishes satisfactory proof of his ability to install such work.

(15). A Journeyman's or Operative's license shall be a separate license for either plumbing, steam or gas fitting.

(16). Any person desiring to follow, engage in

or work at the trade or operation of plumbing, steam or gas fitting, either as a Master or Journeyman or Operative in the City of Edmonton, shall file in the office of the Inspector of Licenses an application for a yearly license, giving his name and place of business of himself or his firm or the corporation for whom he is acting, such application shall be accompanied by proof that the applicant is a qualified Master or Journeyman or Operative, and shall contain a declaration that he or they are willing to be governed in all respects by the rules or regulations which are, or may be adopted by the City and applicable to his particular case.

(7) The Inspector of Licenses shall forward the said application and materials filed in support thereof to the Plumbing Inspector who shall forward the same to the Board of Examiners hereinafter provided for and the said applicant shall at such time and place as the Board shall designate, appear before them and submit to be examined as to his qualifications and competency.

APPLICATION FEE

(8) The fee for such application shall be \$2.00 and shall be deposited at the time application is made to the Inspector of Licenses.

BOARD OF EXAMINERS

(9). The Board of Examiners shall be entitled to receive such examination fee as compensation for their services to be appropriated as the Board shall decide.

(10) There is hereby created a Board of Examiners for Plumbers, Gas and Steam Fitters in the City of Edmonton, consisting of three members one member shall be the holder of a Master's

license, one shall be the holder of a Journeyman's license and the third shall be the Plumbing Inspector. At any examination the Board shall be so constituted that at least two of its members shall belong to the particular trade for which the applicant is applying for a license. The members of the Board shall hold office for one year and shall be eligible for re-appointment.

(11) The Board shall appoint one of its members to act as Secretary, whose duty it shall be to keep all applications, records, papers and books which are required and to do such other work as the Board may direct.

(12) (a) The Board shall within thirty days after the appointment of its members, meet and organize by the selection of a chairman and secretary and they shall designate the time and place for the examination of all applicants for license.

(b) Each examination shall be in whole or in part in writing. If satisfied as to the competency of the applicant the Board shall direct the License Inspector to issue the License upon compliance with all the requirements.

(13). All licenses shall expire on the 31st day of December of each year. The fee for a Master's license shall be \$35.00, and the annual renewal fee shall be \$35.00, and such license shall cover only the section or sections of work in which the applicant qualifies in. The fee for an Operative's license and the renewal fee shall be \$1.00 per annum for each section of the trade in which the applicant qualifies.

(14) Any applicant failing in any examination shall have the right to appear before the Board

at the next or any regular meeting to take additional examination if the Board shall so decide.

LICENSES MAY BE CANCELLED

(15) Any license herein provided for may at any time be revoked or cancelled for incompetency, dereliction of duty, or fraudulent use thereof, after a full and fair hearing before the Board and upon their recommendation.

(16) Every person, firm or corporation having a Master's license shall be responsible for all acts of their agents, workmen or employees. Licensed Masters shall employ only Licensed Operatives and shall from time to time send to the Inspector of Licenses a written notice of all persons employed by them and the nature of the work such employees are engaged in.

(17) An official list of the said Plumbers, Gas and Steam Fitters shall be kept on file in the Office of the License Inspector for the information of the public during business hours and a copy thereof may be obtained on application in writing to such Inspector.

(18) For the purposes of this By-law the office of the Plumbing Inspector is duly constituted as the office of the Board of Health.

(19) Notwithstanding the provisions of this section our licenses for the year 1923, issued to Master, Journeymen or Operative Plumbers shall remain in full force and effect and shall be renewable as if issued under the provisions of this section, but such licensees shall not engage in the business of steam or gas fitting until they are licensed under the provisions of this Section and

any fee paid by said present licensees shall be combined as paid *pro tanto* on account of the fees payable under this section

By-law No. 28, 1920, is hereby repealed.

DONE and PASSED in Council this twenty-first day of November, A.D. 1923.

(Signed)

D. M. DUGGAN,
Mayor

CHAS. ED. K. COX,
City Clerk

(SEAL)

PLUMBING REGULATIONS

300. Where the following expressions or words occur in these regulations they shall be construed in the manner hereinafter mentioned, unless the context otherwise requires.

"Fixture" shall mean a water closet, sink, wash basin, bath tub or other appliance connected with the plumbing system.

"Sewer connection" shall mean that portion of sewer connecting the house drain to a main sewer laid in a street.

"Plumbing system" shall mean the sewerage system and that part on of any water system essential to the operation of the sewerage system within, or in immediate connection with, any house, and shall include the house drain and also any private sewage disposal system connected therewith.

"Master plumber" shall mean any person carrying on the trade or business of a master plumber in the Province of Alberta.

"House drain" shall mean the pipe conduit between the horizontal soil pipe situated outside the external wall of a house and the property line or a private sewage disposal plant.

301. The council of every city, town or village having a public system of sewerage in use or under construction shall appoint a plumbing inspector having qualifications satisfactory to the Provincial Board.

302. The council of every town, village or municipal district not having a public system of sewerage, but wherein any plumbing is in use or under construction may appoint a plumbing inspector having qualification satisfactory to the Provincial Board.

303. Every design for the installation of a

plumbing system in a health district shall be submitted to and approved by the local board of health of the health district before the installation is made. Any private sewage disposal system included therein shall be of a type approved by the Provincial Board of Health.

304. The plumbing inspector shall examine every design for a plumbing system submitted to the local board of health and shall test all plumbing within the city town, village or municipal district for which he has been appointed plumbing inspector. The plumbing inspector shall report on all such systems to the local board of the health district.

305. Before a written permit is issued by the local board or plumbing inspector in its behalf for the construction, alteration or extension of the plumbing system in a house or before any additions are made to said system (excepting necessary repairs), a description of the work to be done shall be filed in the office of the plumbing inspector for the health district in which the construction, alteration or extension is proposed, and no such work shall be commenced until such description shall have been approved by the plumbing inspector.

306. A written permit shall be granted or refused by the local board or plumbing inspector on its behalf within a reasonable time after the receipt of the application therefor, and if granted it shall be valid for six months from the date of issue.

307. All work done under such description shall be subject to the inspection of the plumbing inspector of the health district and no alteration shall be made in the scheme described without a permit in writing from the local board or the plumbing inspector on its behalf.

308. All plans shall be legibly drawn in ink on tracing linen or may be blue prints, and shall be drawn to a scale of not less than eight feet to one inch. Existing work shall be shown in a different colour to that of proposed work.

309. Every plumbing inspector shall attend and inspect all tests of work within his health district for which a permit has been issued in the manner hereinafter set forth.

310. The plumbing inspector of a health district shall be notified in writing by the master plumber executing work for which a permit has been issued when such work is ready for inspection or testing.

311. All work shall be left uncovered and convenient for examination until the same has been inspected and tested. If any such work or any portion thereof has been covered before being inspected and tested the same shall be uncovered by the master plumber executing such work, and left uncovered until such inspection and testing are completed.

312. The plumbing system and every addition, alteration or extension to any such system shall be subjected to an air or water test in the manner hereinafter provided, before the fixtures have been erected.

313. The air test shall be applied by closing all openings in the plumbing system or part thereof to be tested by filling the same with air at a pressure of not less than five pounds per square inch, this pressure to be maintained for a period of not less than five minutes.

314. The water test shall be applied by closing the lower end of the horizontal soil stack and all other openings in the plumbing system, and by filling the pipes with water to the top of the highest soil stack in the house. Any part of such

system may be tested separately, but in such case the head of water shall be at least five feet above all parts of the part to be so tested. The water test shall not be applied in extremely cold weather unless the premises are heated.

315. With a seven days after the completion of the work authorized by any permit the master plumber executing the same shall give notice in writing of the fact to the plumbing inspector of the health district in which the work is installed. Such work shall thereupon be subjected to a smoke test which shall be made by closing all openings in and filling the cut or plumbing system with smoke injected therein by such suitable appliances for the purpose as the plumbing inspector may from time to time approve of under a pressure of one (1) inch water column. Provided that in the case of any addition alteration or extension of any system already installed for which a permit has been issued at the time of installation such smoke test shall be applied to the whole of such plumbing system if such is deemed necessary in the opinion of the plumbing inspector.

316. In making an air water or smoke test all openings in pipes shall be stopped by proper testing plugs screw caps or other plugs the use of wooden plugs plaster of paris or other similar substances for this purpose is prohibited.

317. Air water and smoke tests shall be carried out by the master plumber and he shall furnish all material appliances and labour necessary for the carrying out of such tests. The said tests shall be made in the presence and under the direction of the plumbing inspector.

317 (a). On completion of the plumbing in a house, the master plumber shall file in the office of the plumbing inspector a plan of the underground portions of the plumbing system.

318. The duly appointed plumbing inspector within the health district for which he has been appointed, and every person authorized by him for that purpose, shall have power at all reasonable hours of the day and upon reasonable notice being given and request made for that purpose, to enter upon and have free access to all parts of any house in which there is being installed, or is, a plumbing system.

319. If after such inspection and tests as are prescribed the work so tested is found to have been properly executed and in conformity with the permit or permit issued in respect thereof, the plumbing inspector shall, if so required by the master plumber executing such work, issue a certificate.

320. The plumbing system of every house shall be separate and independent of that of any other house, and shall be so extended to the property line, provided always that the plumbing system of any house may be extended to serve a private garage or other out-house situated on the same lot or property when such garage or out-house is used in connection with the house.

320a. The plumbing system of every semi-detached house or terrace house shall be separate and independent of that of every other semi-detached or terrace house, and shall be so extended to the property line.

321. The main horizontal soil pipe shall be not less than four inches in diameter and the fall to the house drain shall be not less than a quarter of an inch per foot throughout the length of the said main horizontal soil pipe. It shall be laid in a trench cut to a uniform grade or it shall be constructed along the foundation walls of the premises above the cellar floor or it shall be suspended from the ceiling of the basement beams.

by heavy iron or steel hangers as hereinafter provided. It shall be extended at least three feet outside the external walls of the house before being connected to the house drain connection. No house shall be erected or built over the house drain connection.

322 There shall not be placed on the main horizontal soil pipe any main drain or other trap or obstruction which would prevent a free current of air passing through and out at the top of the vertical soil stack of the plumbing system.

322 (a) A clean-out shall be placed in all cases on the main horizontal soil pipe as close as possible to the point where it leaves the cellar; the said clean-out shall be extended to, or above, the cellar floor. Where there is no cellar in the house the clean-out shall be placed at the most convenient point, shall be extended to the first floor of the house and constructed in such a way that easy access can be had to it. The main clean-out for a main horizontal soil pipe shall be formed by a hand hole; other clean-outs shall be formed by a "Y" and extended without change of direction. A clean-out shall be provided at the foot of each vertical soil stack and shall be so placed as to be easily accessible.

322 (b) The clean-out on a main horizontal soil pipe or on a vertical soil stack or on a rain water trap shall be of the full diameter of the pipe or stack or trap on which it is placed, except where the said pipe or stack or trap is not more than four inches in diameter in which case the clean-out shall be not less than four inches in diameter.

323. A clean-out fitted on a cast iron pipe shall be leaded and caulked into a flange or hub. In no case shall a clean-out be fitted into a plain piece of pipe.

324. Every screwed cover on a clean-out fitted on a cast iron pipe shall be made of brass, not less than one-eighth of an inch in thickness, and having a solid square or hexagonal nut not less than one-half in. h high, and of at least a diameter of one inch, and shall be screwed and properly fitted and made air tight. The threaded parts of a clean-out fitting shall have not less than five threads of iron pipe size, measuring eight threads to the inch.

325. Every cellar forming a part of any house to which these regulations apply shall have a catch basin trap to receive the surface drainage, including the water from weeping drains, overflow from surface water tanks or rain-water leaders or others pipes collecting or carrying surface water. Where practicable the catch basin trap shall be placed so that the water line in said trap is six inches above the top of the main horizontal soil pipe and shall be at least three feet distant from the said pipe.

326. The arrangement of soil stacks, waste and vent pipes shall be as direct as possible. All changes in direction of horizontal pipes shall be made with "Y" branches and one-sixteenth, one-eighth or one-sixth bends.

327. The size of the main horizontal soil pipe shall be determined by the total area of the house and paved surfaces to be drained thereby, according to the following table viz:

<i>Diameter of Pipe</i>	<i>Area to be Drained</i>
4 inches	3,106 square feet
5 inches	4,819 square feet
6 inches	6,873 square feet
8 inches	12,210 square feet.
10 inches	19,130 square feet.

provided that the horizontal stack may be decreased in diameter after passing a rain-water

leader or surface inlet proportional to the decrease in area drained and based on an assumed velocity of 3,150 feet per second in the main horizontal soil pipe, but in no case shall the main horizontal soil pipe be less than four inches in diameter.

328. No inverted joint shall be used below any fixture. No connection to any soil, waste or vent pipe shall be made by boring or tapping the pipe or by a saddle.

329. In every house where fixtures are connected directly with the plumbing system, there shall be a main vertical soil and venting pipe known as a ventilating stack which shall not be less than four inches in diameter, and shall extend from the main horizontal soil pipe to a point above the roof of such house.

330. Every soil and waste pipe shall be of not less than the respective diameters set out in the following table viz:

<i>Pipe</i>	<i>Diameter</i>
Main soil stack	4 inches
Main soil stack, where there are water closets on eight or more floors	5 inches
Branch soil pipe	4 inches
Main waste pipe	2 inches
Main waste pipe, where there are one or more sinks on five or more floors	3 inches
Branch waste pipe for a sink, bath or laundry tub	1 ½ inches
Or where set in ranges of three or more	2 inches
Branch waste pipe for a wash basin	1 ½ inches
Or where set in ranges of four or more	2 inches
Branch waste pipe for other fixtures	1 ½ inches

331. A sink waste pipe shall not be connected to a closet bend or other branch waste pipe, but shall connect directly with a soil or waste pipe.

Every horizontal sink or laundry tub waste pipe over five feet in length shall be constructed of iron pipe and be provided with a clean-out suitably placed and easily accessible.

332. Every soil, waste and ventilating stack and pipe shall be constructed of cast iron, galvanized wrought iron, galvanized steel, or brass pipe, except as provided in the next succeeding section. Every underground soil waste and vent pipe shall be of cast iron.

333. A branch waste pipe (except a sink or laundry tub waste pipe) and a ventilating pipe not exceeding ten feet in length may be constructed of lead; such lead pipe shall be of not less than the following weight in proportion to the length, viz:

<i>Diameter of pipe</i>	<i>Weight per lineal yard</i>
1 1/4 inches	7 pounds
1 1/2 inches	9 pounds
2 inches	12 pounds
4 inches	24 pounds

334. Every soil, waste and ventilating pipe shall be located inside the premises, and shall not be placed inside the external wall of a frame building, and every terminal of such pipe shall be located not less than ten feet horizontally distant from two feet above any opening window, door or other opening device in the building and shall not be located closer than ten feet to the property line of any house.

335. Every terminal of a soil waste or ventilating pipe of three inches, four inches or five inches shall be increased one inch in diameter and each under three inches shall be increased to four inches before passing through the roof, by means of an increaser which shall conform as nearly as possible to the pitch of the roof, and

shall project to the outer air not less than one inch and not more than three inches above the roof and be made weatherproof by means of a lead flashing. All lead used for this purpose shall be in weight at least five pounds per square foot and shall be worked over and into the hub of the masonry at least one inch with not less than five inches of cover on the roof on either side of the pipe terminal and it shall be finished with a cast or wrought iron ring properly vulcanized with lead or oakum and red lead in the hub thereof.

336 Every vertical stack and pipe shall be properly supported at its base and at intervals not greater than twenty five feet. Every horizontal cast iron pipe shall be supported at intervals of not more than five feet by copper cast iron wrought iron or steel pipe hangers or nine inch brick piers. Every horizontal lead pipe shall have continuous support throughout its entire length and every other horizontal pipe shall have supports at intervals of not more than ten feet.

337 Every fixture or inlet to the plumbing system shall be separately and effectually trapped by a water sealing trap placed as near as possible to the outlet of the fixture in no case shall a trap be more than two feet distant from such outlet and every floor drain from a lavatory or kitchen shall discharge over a catch basin trap.

338 Every fixture and floor drain trap shall have at least a one and one half inch water seal and shall be set true to its water level.

339 The discharge from a fixture shall not pass through more than one trap before reaching the soil pipe.

340 Every trap shall be of the same size as the size of the waste pipe in which it is to be attached and shall be properly supported.

341 A vent born on an earthenware trap shall not be used.

342. No trap (except an earthenware trap) which depends on an interior partition for a water seal shall be used.

343. Every trap on a fixture (except an earthenware trap) shall have a suitable means of access for cleaning purposes.

344. Every iron trap for a rain-water leader and for cellar drainage shall be not less than four inches in diameter in any case, not less than the size of the rain-water leader, and shall have a seal of not less than four inches.

345. Every clean-out on a lead trap shall be welded to the trap. The threaded parts of a clean-out fitting shall have not less than five threads of a gauge equal to sixteen threads to an inch. Every part of a clean-out shall be not less than one-eighth of an inch in thickness.

346. Every waste pipe from the kitchen sink of an hotel, eating house, restaurant or other similar establishment shall be connected to a grease trap which shall be impervious, constructed of iron and so placed as to be easily accessible to for the purpose of being opened and cleaned.

347. Every waste pipe of any fixture not in regular use shall be kept effectually plugged.

348. Whenever any plumbing system, or any part thereof is altered or extended every dead end or unused pipe shall, as far as practicable, be removed and the openings and connections closed by plugs, screwed, caulked or soldered in.

349. When a soil or waste pipe is placed in any house, for future use, the necessary ventilating pipe shall also be put in at the same time and the whole work shall be tested and inspected as if the same were intended for immediate use. Every opening in such pipe not in use shall be closed by a plug, screwed, caulked or soldered in.

334. No waste pipe from any refrigerator, cold storage or other receptacle in which food stuffs are kept or stored shall be connected with any drain soil or other waste pipe but such waste pipe shall discharge into an open water supplied fixture or floor drain properly trapped. Every refrigerator waste pipe shall be trapped separately and so arranged as to admit of frequent flushing and shall be as short as possible. Where two or more refrigerator waste pipes are connected together or to a stack said waste pipe or stack shall be extended through the roof of the premises for ventilation.

335. The waste pipe from a water filter, gas engine, soft water lift or air compressor shall not be connected directly with any drain soil or other waste pipe but shall discharge into an open fixture or floor drain properly trapped.

336. Every overflow pipe from a tank shall discharge into a properly trapped fixture having a waste pipe at least equal in diameter to the overflow pipe or into a floor catch basin. Every emptying pipe from a tank shall discharge in the same manner as required for an overflow pipe or it may be connected with the overflow pipe.

337. Every waste pipe from a drinking fountain and soda water fountain shall be separately trapped and shall discharge into an open fixture or floor drain properly trapped, provided that in cases where two or more fixtures are connected to a waste line the said waste line shall be extended as a vent through the roof of the house.

338. Every bar fixture shall be separately trapped and shall discharge into an open fixture or floor drain properly trapped, the waste pipe being extended as a vent through the roof of the house.

339. No drainage from a garage shall discharge directly into a soil pipe, but shall discharge into

a catch basin of proper dimensions. The discharge pipe from such catch basin may be connected with the soil pipe and shall, where necessary in a public garage, be provided with such traps, or other fixture, as may prevent the ingress of gasoline or solid matters into the soil pipe.

356. Every fixture shall be protected from siphonage by an anti-siphon trap or a trap with a vent pipe. Such a vent pipe shall be constructed according to the following table:

Dia. of Pipe	Max. Length of pipe	No. and sizes of traps that may be vented thereby
$\frac{1}{4}$ in.	21 ft.	1 trap of $\frac{1}{8}$ in. to 2 in. in dia.
$\frac{1}{2}$ in.	25 ft.	1 to 2 traps of $\frac{1}{8}$ to 2 in. in dia.
2 in.	76 ft.	1 to 3 traps of 2 in. to 4 in. in dia.
$2\frac{1}{2}$ in.	73 ft.	4 to 6 traps of 2 in. to 4 in. in dia.
4 in.	100 ft.	3 to 12 traps of 2 to 4 in. in dia.
6 in.	200 ft.	16 or more traps of 2 to 4 in. in dia.

Four traps of $\frac{1}{4}$ or $\frac{1}{2}$ inches in diameter shall be considered equal to one trap of four inches in diameter.

Where a yoke vent is used not more than three traps shall be inserted on the yoke without an intersecting vent pipe, and the vent pipe at end of line shall be taken off between the last two fixture fittings.

357. Every offset on a ventilating pipe shall, where practicable be made at an angle of not less than forty five degrees to the horizontal and every ventilating pipe shall be connected at the bottom with the soil or waste pipe in such a manner as to prevent the accumulation of rust scale. Every branch ventilating pipe shall be kept above the top of the fixture which it serves or be constructed in such other manner so as to prevent its use as a soil or waste pipe.

358. A vent pipe shall not be necessary

- (a) Where the trap for the upper fixture on a stack is not more than three feet from such stack and the connection of the waste pipe to such stack is not more than three inches below the water level of the trap,
- (b) Where only one water closet is connected with a stack and is located not more than three feet from such stack,
- (c) Where two water closets are located not more than three feet distant from the stack on the same floor and discharge into a double "Y" branch and no other water closet discharges into the stack above such double "Y" branch.

359. Every vent or anti-siphon pipe shall be connected to the waste pipe as close as possible to the outlet of the trap and in no case shall it be more than twelve inches from it, and such pipe shall not be connected to the crown of the trap. Vent pipe shall, where possible be constructed on the continuous vent or yoke vent principle.

360. Every vent or anti-syphon pipe shall be extended through the roof or may be connected to a soil or waste pipe at a point above the highest fixture connected therewith.

361. Every fountain cuspidor shall have an anti-syphon trap located as close to the fixture as practicable. The waste pipe from such fixture shall not be less than one and one-quarter inches in diameter.

362. Every cast iron pipe and fitting must be true to standard, sound, free from cracks, sand holes, blowholes and cold shuts. No filling with metal, cement or other material or burning of iron shall be permitted.

The inside diameter of the barrel shall not be more than one-eighth of an inch less than the nominal size of the barrel. The wall thickness shall be uniform showing no greater variation than 1-32 inch in extra heavy weight pipe and 1-64 inch in medium weight pipe and at hub and spigot ends shall present a true circle.

The bore shall be 4 inch. free from flut. ridges and adhering sand and except for unavoidable irregularities the full nominal bore shall be maintained.

The iron used in its construction shall be of such a quality as will admit of easy cutting with file or chisel. Every pipe and fitting shall be thoroughly coated inside and outside with coal tar pitch or oil and shall have the manufacturer's name or trademark affixed and whether medium weight or extra heavy clearly stamped on hub thereof.

303. Every wrought iron and steel pipe shall not be less than the minimum weight per linear foot set forth in the following table:

<i>Diameter of Pipe</i>	<i>Weight per Linear Foot</i>
1 1/4 inches — — — — —	2.24 pounds
1 1/2 inches — — — — —	2.68 pounds
2 inches — — — — —	3.61 pounds
2 1/2 inches — — — — —	5.74 pounds
3 inches — — — — —	7.54 pounds
3 1/2 inches — — — — —	9.00 pounds
4 inches — — — — —	10.66 pounds
4 1/2 inches — — — — —	12.49 pounds
5 inches — — — — —	14.50 pounds
6 inches — — — — —	18.76 pounds
7 inches — — — — —	23.27 pounds
8 inches — — — — —	28.16 pounds
9 inches — — — — —	32.70 pounds
10 inches — — — — —	40.00 pounds

304. Every wrought iron and steel pipe shall

be galvanized inside and outside. Every fitting for a wrought iron or steel vent pipe may be either a cast or malleable iron steam or water fitting, every fitting for waste or soil pipe or rain-water leader shall be of heavy cast iron recessed and threaded drainage fittings, with smooth interior water way, and threads tapped so as to give a uniform grade to branch pipes of at least one fourth inch per foot, and shall be true to standard. Every fitting for wrought iron or steel waste, soil or vent pipes shall be galvanized or asphalted.

355. Every brass pipe used for a soil, waste or vent pipe shall be thoroughly annealed, seamless, drawn tubing having not less than the outside diameter, weight, thickness and gauge as set forth in the following table

Outside Diameter of pipe	Weight per foot	Thickness in inches	British Imp. wire gauge	Brown & Sharp gauge
1 ¼ inches	6.55 lbs.	1-15 in.	18	14
1 ½ inches	7.96 lbs.	1-15 in.	16	14
2 inches	11.4 lbs.	1-16 in.	16	14
2 ½ inches	20.2 lbs.	1-16 in.	12	10
3 inches	24.1 lbs.	1-16 in.	12	10
4 inches	47.4 lbs.	1-8 in.	10	8
5 inches	72.2 lbs.	1-8 in.	10	8
6 inches	87.1 lbs.	1-8 in.	10	8

356. Every brass pipe used for an outlet from a fixture, overflow pipe, flush pipe or any part of a waste pipe on a local side of any trap shall not be less than 16 British Imp. gauge or 14 Brown & Sharp gauge, and every tee, coupling and fitting on such pipe shall be heavy cast brass with iron pipe or standard brass threads and every such tee fitting shall be recessed and of first quality brass having a smooth interior and thickness in

wa is of not less than twice the wall thickness of tube specified in table of brass pipe sizes.

367. Every cast brass drainage fitting and cast brass trap shall be recessed and of first quality brass having a smooth interior and thickness in their walls of not less than twice the wall thickness given in the table of brass pipe sizes. The recessed parts or sockets shall be at least one and one-half times the thickness of the wall of the fitting.

368. Every brass pipe fitting with screw joint connections shall have not less than the following number of threads per inch and number of inches threaded:

<i>Size of pipe</i>	<i>No. of threads per inch</i>	<i>No. of inches threaded</i>
1½ inches to 2 inches	20	½ inch
2½ inches to 3 inches	12	¾ inch
4 inches to 6 inches	12	1 inch

369. Every connection between a brass pipe and an iron pipe shall be made by a brass threaded bushing with a standard iron pipe thread outside and a standard brass pipe thread inside, and every brass fitting and trap shall have legibly stamped on it in a conspicuous place the name or trademark of the maker thereof.

370. Every brass supply pipe shall be of iron pipe gauge and all threaded connections on such pipe shall be of iron pipe thread for same size of pipe and shall be tapered. In no case shall a slip joint be made on water supply pipes, except directly at the faucet or bubb. The diameters and weights per lineal foot of all brass tubing used

for this purpose shall be not less than is set forth in the following table:

<i>Diameter</i>	<i>Pounds per lineal foot</i>
$\frac{1}{8}$ inch	.62 pounds
$\frac{1}{4}$ inch	.90 pounds
$\frac{3}{8}$ inch	1.25 pounds
$\frac{1}{2}$ inch	1.70 pounds
$\frac{5}{8}$ inch	2.05 pounds
$\frac{3}{4}$ inch	3.00 pounds
1 inch	4.00 pounds
$1\frac{1}{4}$ inch	5.75 pounds

371. No slip joint or coupling shall be used for a connection on the sewer side of any trap.

372. Every brass caulking ferrule shall be of cast or drawn brass, not less than four and one-half inches long and one-eighth of an inch thick and shall be free from sand holes and other defects and shall be recessed for a depth of three-quarters of an inch the recessed portion to have an inside diameter not less than one-quarter of an inch greater than the size of pipe to which it is to be connected.

373. Every soldering nipple shall be of heavy brass, having hexagon shoulders and be recessed for lead pipe.

374. Every joint between lead pipes or between lead and brass pipes or traps shall be a wiped solder joint. All wiped joints shall be fully wiped plumbing joints not less than two inches long except in the case of floor or wall flange joints. Every joint between an iron and a lead pipe shall be made with a brass solder nipple or ferrule.

375. Every joint on a cast iron pipe shall be made with packed oakum and molten lead, the lead to be not less than three-quarters of an inch deep, thoroughly caulked and made gas and water tight. Every joint on a wrought iron, steel or

brass pipe shall be a screwed joint made up with a paste of red lead or other suitable substance and shall be made gas and water tight and the burr formed in cutting shall be carefully trimmed out.

376 Every fixture with an earthenware trap connected directly with a soil or waste pipe shall have a solid brass plate not less than three-sixteenths of an inch thick secured to the lead bend or pipe and screwed to the floor when floor is made of wood. Where brass or iron pipe is used the floor plate shall be screwed to the pipe, and in either case the floor plate shall be bolted to the trap flange with brass bolts and nuts. The joint shall be made tight with an asbestos-graphite ring, or with red or white lead of the proper consistency, or with a putty of wire joint. In wooden floor construction the connection between the earthenware and soil pipe shall have a suitable length of lead pipe between the wiped joint and the under side of the floor.

377 Every fixture other than a water closet or clinic sink shall have a strong metallic strainer or bar over the outlet to prevent the obstruction of waste pipe.

378 Every water closet shall be fitted with either a siphon discharge flush, or pressure tank, or automatic flushing valves of a design satisfactory to the Provincial Board of Health. The copper lining of every flush tank shall be of not less than ten ounce copper.

379 No pan valve plunger, washout, latrine or trough water closet shall be used.

380 Every fixture shall be set open and free from all enclosing woodwork.

381 No local vent pipe shall be connected to a main local vent pipe at any point below the level

of the local vent pipe from the highest compartment in the house connected with such main local vent pipe.

382. In every house where a water closet room is partitioned off from a room used for other purposes the partition between such rooms shall be extended to the ceiling or be cased over, and such partition shall be reasonably airtight.

383. Every water closet or urinal room shall open to the outside air by means of a window or skylight having an area of not less than one-tenth of the total floor space of the room in which any such fixture is installed, provided, however, that in no case shall such a window or skylight have an area of less than 432 square inches and at least 50 per cent of the area of such window or skylight shall be made so that it can be easily opened.

(a) Provided further, however, that where it is not possible to install a window or skylight as aforesaid a compartment may be ventilated by means of a local vent pipe constructed of metal piping. Such local vent pipe shall have a minimum cross sectional area of seven square inches and shall have at least three square inches in cross sectional area for every water closet or urinal which it serves. Such local vent pipe or the main local vent pipe to which it is connected shall be connected to a chimney flue by a cast or wrought iron pipe of a diameter not less than the vent to which it is connected and of at least three feet in length which shall be inserted into the flue and thoroughly cemented.

384. No water closet or urinal shall be located in the sleeping apartment of any house. Every room in which any such fixture is installed shall be separated from all other rooms and hallways

by a substantial and reasonably air-tight partition extending to the ceiling.

385. No water closet or urinal shall be placed in the cellar or basement of any house unless such cellar or basement has a cement or other floor impervious to moisture and is well lighted with natural light or is well maintained with artificial light and has easy means of access.

386. Every tank for storing water intended for drinking or cooking purposes shall be covered so as to exclude dust and shall be so located as to prevent the water contained therein from being contaminated by gas or odors and shall be provided with means of access for cleaning purposes. Every such cover shall be of metal and tight fitting.

387. Every urinal installed in any hotel, railroad station, hospital, theatre, public school, public institution or lodging house shall be of vitrified earthenware of the integral stall type only. Every such urinal shall be placed in a room having the floors and the walls to a height of four (4) feet finished in tile laid in cement, and such floor shall be graded to the trough in the urinal. Every urinal shall be fitted with an automatic flush tank so arranged as to discharge at intervals of not less than ten minutes.

388. Wooden baths, wash tubs, sink or metal-lined wooden fixtures shall not be connected to any plumbing system.

388a. No rain-water leader shall be used as a soil, waste or vent pipe, nor shall any soil, waste or vent pipe be used as a rain water leader. Every rain-water leader inside any premises shall be constructed of cast iron or galvanized wrought iron or steel pipe with roof connection made gas tight by means of a heavy lead or copper drawn luting, wiped or soldered to a pipe. Every rain-

water leader shall be trapped before being connected with the house drain. Any form of construction allowing cement, stone or brick to form a seal or trap is hereby prohibited.

388. No steam exhaust pipe, boiler, blow-off or drip pipe shall discharge directly into a soil pipe. Every such pipe shall connect to a condensing tank of proper dimensions. The discharge pipe from such a tank shall connect with the soil pipe and shall be provided with such a trap as may be necessary to prevent the ingress of sewer air, provided, however, that this section shall not apply to ordinary boilers connected with a cooking range or low pressure heating system in any house. No sediment cock shall directly connect with a soil pipe.

389. No gate or back water valve shall be placed on any soil pipe in such a manner as to interfere with the ventilation of the plumbing system. Every cover on a back water valve shall be bolted or screwed, no "lugged" cover shall be used.

390. Every ejector pump tank or other receptacle constructed in any house for the reception of sewage or drainage shall be constructed so as to be neither a nuisance nor a menace to health.

391a. Every waste pipe from a laboratory sink or any sink or fixture into which considerable quantities of acid is discharged or deposited shall be provided with an acid or diluting trap and the waste pipe from such acid trap shall be of porcelain, cast iron specially prepared or coated on the inside with porcelain or glass enamel or lead pipe and such waste pipe shall be separate and distinct from the sanitary system of piping throughout the building by connecting with the main sanitary system through a house or disconnecting trap provided with a fresh air inlet. Every

and waste pipe shall be extended to the outside of the building at its upper end.

392. All work in connection with any plumbing system shall be executed in a thorough and workmanlike manner. All faulty or defective new work shall be altered to conform with these regulations.

392a. The plumbing inspector of every health district or the local board of health of every health district shall, when he or it, becomes aware of there being a faulty or defective old plumbing system installed in connection with any house require the same to be altered to conform to these regulations. Notice may be given by delivering or mailing the same by registered mail to any owner.

393. The plumbing system in every house shall be maintained by the owner at all times in good working condition and in conformity with these regulations. In the event of any defect being discovered in such system the same shall, on the order of the plumbing inspector or the local board of the health district, be at once made good.

394. Should the plumbing inspector of any health district refuse to issue any permit required by these regulations, the applicant for such permit shall have the right to appeal from such refusal to the local board of health.

395. Such appeal shall be made by the applicant filing a notice in writing specifying the grounds of such appeal within seven days after such refusal. Said notices shall be filed in duplicate, one copy with the local board of health and the other copy with the plumbing inspector. The said local board of health shall, within seven days from the receipt of the application, decide

the matter and may direct the plumbing inspector to issue a permit to the applicant.

396. The plumbing inspector of every health district shall examine and test the plumbing system.

397. The house drain from a point three feet outside the house to the sewer at the boundary line of the street or to a private sewage disposal plant shall be of first quality salt-glazed, vitrified, earthenware pipe or other pipe approved by the Provincial Board. The interior of same shall not be less than four inches in diameter.

398. The pipe shall be laid on an even grade of not less than one in forty for a four-inch pipe and one in seventy for a six-inch pipe.



BY-LAW No. 20

(With Amendments to May 31st, 1923)

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A By-law Respecting the Installation and Use of Electric Current

The Municipal Council of the City of Edmonton, duly assembled, enacts as follows

DEFINITIONS

- 1 (1) "Electric Signs" shall mean:
- (a) Signs having all or any part of the letters of which such signs may be constructed in an outline of electric lamps.
 - (b) Signs having transparent glass illuminated with electric lamps.
 - (c) Signs having a border or portion thereof outlined by electric lamps.
 - (d) Signs illuminated at night by the reflected light of electric lamps.

(2) The words "City electrician" or "City Electrical Engineer" wherever used in this By-law shall be construed to mean and include the Superintendent of the Electric Light and Power Department, of the City of Edmonton. (1922, By-law 29, Sec. 1)

(3) The word "Owner" wherever used in this By-law shall be held and construed to mean and include every person using or operating electrical equipment subject to inspection under this By-law.

(4) The words "Electrical Equipment" wherever used in this By-law shall be held and construed to mean and include any electrical wires, appliances, apparatus or electrical construction of any kind whatsoever, installed or used in or

on any building or structure, in the City of Edmonton

(5) The word "Approved" wherever used in this By-law shall be held and construed to mean 'approved by' the City Electrician

RULES

NATIONAL ELECTRICAL CODE

3 (1) The rules for governing the installation of electric wiring and apparatus and electrical material and which are hereby approved by the Council of the City of Edmonton shall be what is known as the current edition or current amendments or alterations of the National Electrical Code as recommended by the National Fire Protection Association together with and in some places modified by the following special provisions all of which are hereby enforced.

INSTRUCTION BULLETINS

(2) In order to ensure a uniform interpretation of these rules and to provide for special conditions the City Electrician shall have the power to decide and define the technical details for satisfactory and safe electrical installations. He may from time to time issue such signed instructions as he may consider necessary to explain these requirements and all work shall comply with such regulations.

The regulations so issued by the City Electrical Engineer from time to time shall be deemed to be part of this by-law and have the same force and effect as if contained herein. (1922, By-law No. 9, Sec. 2)

PERMITS

1 (1) No new electrical installation or alteration or addition to existing ones shall be undertaken by any person other than a contractor or a journeyman duly licensed under the provisions

of By-law No. 47, 1921, re-numbered as By-law No. 3, 1922, and then not until a permit authorizing the work has been obtained in writing.

APPLICATION FOR PERMIT

Application for such permit shall be made to the City Electrician in writing on the regular approved form and if required the applicant shall furnish plans for the proposed wiring and a copy of specifications giving location, etc. Upon receipt of such application and upon payment of the fee hereafter prescribed, if approved such permit shall be given.

INSTALLATION WITHOUT PERMIT

(2) The act of installing electrical wiring, fittings, apparatus, etc. or adding to any existing installations is hereby declared to be unlawful prior to the issuance of such permit. The City Electrician may refuse to issue a permit if the person applying for same has neglected to carry out the provisions of this By-law.

INSPECTION POWER OF CITY ELECTRICIAN

(3) The City Electrician is hereby empowered to inspect or re-inspect all overhead, underground and interior wiring and apparatus conducting electric current for light, heat or power, telephone, telegraph, or used for radio (wireless) installations, or any other purpose within the City limits, irrespective of ownership. When said conductors or apparatus are found to be unsafe to life or property or otherwise contrary to the provisions of this By-law, the City Electrician shall notify the person owning, using or operating same to comply with this By-law within forty-eight hours. Any person failing or refusing to repair, change or remove same within forty-eight hours after receipt of such notice shall be liable to the penalty provided herein. The City Electrician may also for any violation

of this By-law order and compel the cutting off and stopping such current until the provisions of this By-law are fully complied with.

(3a) The provisions of the previous sub-section (3) shall be construed to mean and include the poles, wires, cables and other electrical apparatus and allied details owned and operated by the City of Edmonton and as represented by its various departments.

(3b) The City Electrical Engineer is hereby empowered and it shall be included in his duties to also deal with the following matters:

Supervise and make provision for the joint use of poles by the Civic Electric Light, Power Telephone, Street Railway Police Fire and other Departments, plan and supervise the general layout and development of an electric feeder system for light, power and street railway energy, represent the City Commissioners on electrical matters affecting the city in general as distinctive from the regular functions of any individual superintendent or Department to carry out such duties as may be designated from time to time by the Commissioners.

BAD WORKMANSHIP

(4) Work badly arranged or poorly executed will not be passed even if the materials, etc., used be satisfactory.

MAY ENTER ON PROPERTY TO INSPECT

(5) It shall be lawful for the City Electrician to enter at any reasonable hour upon any property or building subject to the regulations of the By-law, for the purpose of inspecting or re-inspecting the wiring or apparatus in same, or where he may suspect that an attempt is being made to defraud by interfering with the proper working of any meter. No person shall molest, obstruct, or interfere with said City Electrician

or other person acting in aid of such City Electrician in the discharge of his duties under this By-law

INTERFERING WITH WIRING, ETC.

(16) No person shall cut, damage or interfere with any electric wiring that has been inspected and accepted by the City Electrician or his inspector, nor shall any person bring or lay any woodwork, brick masonry or other work in contact with any electric wiring or leave same in contact with such wiring

IRRESPONSIBLE ACTION TO INSPECTION

(17) The Electrical Contractor shall be entirely responsible for the condition of wiring until same has been approved and accepted by the City Electrician

24 HOURS NOTICE FOR INSPECTION

(18) Contractors, wiremen or other persons desiring to have an installation or portion thereof inspected shall give not less than twenty-four hours notice in writing to the City Electrician

COVERING UP WIRING WITHOUT INSPECTION

(19) Every person who shall cover up from view by lathing, boarding or other material, any wiring that has not been inspected and accepted by the City Electrician shall be liable to the penalties of this By-law. The City Electrician shall have power to remove any such obstructions which may prevent perfect inspection of current carrying conductors, such as lath, plaster, boarding or partitions and the person who shall have covered up same from view shall also be required to pay all costs or repair any damage that may be caused by removing such material. The above conditions shall also apply in cases where the City Electrician may suspect that an attempt is being made to defraud by interfering with the proper working of any meter or meters.

CANCELLATION OF PERMITS

(10) The City Electrician may cancel any permit if active work is not commenced within ninety days of date of permit. The City Electrician may refuse to issue further permits to any person who has not satisfactorily completed the work covered by any previous permit issued to him.

TEMPORARY WORK

(11) In regard to temporary work the rules for permanent work need only be so far observed as to effectually guard against shock and fire.

Temporary installations may be authorized in writing for a period of thirty days and may be renewed for a further period at the discretion of the City Electrician. Each case to be treated on its merits and the duration of the period over which the permit shall extend will be regulated accordingly.

FEES FOR ELECTRICAL INSPECTION

SEPARATE PERMITS

4. (1) A separate permit is required for each class of work. Installations supplied by different service wires or different main entrance switches require separate permits. In every case fitting permit is to be separate from wiring permits.

INSPECTION OF FITTINGS

(2) Only one inspection will be made on each fitting permit.

COUNTING OUTLETS

(3) Switches are not counted when estimating permit fees, but all other outlets are to be included.

ALTERATIONS AND METER LOCKS

(4) To alter or repair electric wiring, fittings and other apparatus, or for new meter loop each permit \$.50

(Applying only to existing installations and where no additional outlets or loads are added.)

NEW WIRING AND ADDITIONS TO WIRING ONLY

(5) 1 to 100 outlets, per outlet \$.45

All over 100 outlets (101 and up) per outlet .41

(No permit issued under this clause for less than fifty cents)

FITTINGS

(6) 1 to 50 fittings, per fitting \$.02

All over 50 (51 and up) per fitting .01

(No permit issued under this clause for less than twenty-five cents)

ELECTRIC SIGNS

(7) Each sign, decorative or outline lighting installation \$1.00

Each additional sign on the same permit. .50

MOTORS OR GENERATORS

(8) One motor up to and including 5 h. p. \$.50

One motor over 5 h. p. .75

Each additional motor on the same permit .25

HEATING OR SPECIAL APPARATUS

(9) For each electric range and for each complete installation of radiators, laundry heating equipment, central, photographic, moving picture machine, arcs or similar special apparatus \$0

EXTRA VISITS

(10) When extra visits are necessary either through faulty work or under any conditions where the City Electrician is satisfied that reasonable care has not been exercised an extra fee may be charged, per visit \$.50

TEMPORARY PERMIT

- (11) For temporary permit of any kind,
each permit 50

SPECIAL SERVICES OF INSPECTOR

- (12) When the services of an inspector are required for arbitration, testing, reporting on old installations or similar work at parties, the fee per hour or fraction thereof shall be \$1.00

CONDUIT WORK

5 Metal conduit work shall be used for all installations as hereinafter specified. (Approved metal molding will be accepted if installed on the surface with approved fillings.)

FIRST CLASS FIRE LIMITS

- (1) All electrical work in new buildings inside the first class fire limits.

FIREPROOF BUILDINGS

- (2) All buildings which according to City Building By-law are required to be of full fireproof construction.

220 VOLTS

- (3) All wiring for 220 volts unless entirely concealed.

SERVICE ENTRANCE WIRING

- (4) All service entrance wiring from point outside of building to the interior of metal box containing main service switch and all wires from same to load side of meter.

EXTERIOR WIRING

- (5) Wiring for signs or other exterior lighting except for aerial lines where not in contact with sign or building.

TENTS

- (6) Wiring in tents or buildings with canvas roofs, no drop cords will be allowed, lamps must

be controlled by a porcelain switch on wall or flush switch with plate grounded. Meter to be protected from possibility of moisture reaching same.

ALTERATIONS

(7) All alterations and additions in any building used in the conduit class shall be made in approved rigid or flexible metal conduit or metal molding. Except that the City Electrician may waive the conduit class for buildings of a temporary nature where he considers the conditions warrant same.

CERTAIN BUILDINGS ANY EXPOSITION OF WIRING EXPOSED

(8) Exposed surface wiring in the following buildings in any part of the City to be wired in conduit. If not included in the regular conduit class such wiring shall be exempt from conduit or metal molding when installed as concealed knob and tube work and then entirely enclosed by sheeting, plaster or other approved means, viz:

Buildings other than a private residence designed for use as stores, offices, or living rooms, garages, stables, any buildings containing a hall designed for use as a church, public meeting rooms, dance halls or similar public gatherings. Buildings used for handling or storage of paints, oils or gas line or where similar hazardous processes are carried on, elevator shafts, any buildings or portions of same where the wiring is particularly liable to be subject to injury or disturbance.

GENERAL

APPROVED MATERIAL

(1) All material and apparatus shall be subject to the approval of the City Electrician unless specified in the "List of approved electrical fittings" published by the National Board of Fire Underwriters.

UNDERGROUND FEEDS IN FIRST CLASS FIRE DISTRICT

(2) All buildings having basements situate within the First Class fire district shall have the main service feeders so arranged that connection can be readily made between same and the underground light or power service wires that may hereafter enter such basements.

METAL BOXES

(3) All cutouts, fuses and knife switches must be enclosed in an approved metal box equipped with metal door or metal lined cabinet, except on regular switchboards in suitable locations.

MOULDING

(4) The use of wood moulding is not permitted.

MOTOR AUTO. STARTERS

(5) All A. C. motors larger than 5 h.p. must be equipped with an approved starting device for limiting the current.

OBSTACLE NEAR SWITCHBOARDS

(6) Passageways around switchboards, motors and similar apparatus must be kept clear of any obstructions.

(7) All those parts of premises containing electrical apparatus requiring attention while in operation must be adequately lighted.

HAZARDOUS APPARATUS

(8) Suitable provision must be made to prevent unauthorized persons from having access to electrical apparatus that might prove hazardous to life, e.g. transformer rooms, switchboards, etc.

REPAIRS

(9) All electrical installations must be kept in proper working condition and repair or else permanently disconnected from all source of electric current.

VOLTAGE DROP

(10) All interior installations must be wired

with copper wire of such size that the voltage drop to any light or appliance with all lights or appliances in use shall not exceed two per cent. The voltage drop to any motor with all motors in use shall not exceed five per cent. The load on existing wiring must not be increased so that the voltage drop exceeds these amounts.

For violation of this clause the City Electrician may disconnect the installation from service until the necessary changes have been made to his satisfaction.

FIRE LIMITS

(11) The fire limits for the purpose of this By-law shall be as defined in the By-laws of the City of Edmonton.

CERTIFICATES OF INSPECTION

7 The City Electrician may issue a certificate of inspection on any installation after he shall have satisfied himself that all construction and material is in accordance with the rules and regulations forming a part of this By-law and after payment of fees heretofore prescribed. Such certificate shall give the date of said inspection. The right is reserved to have service reconnected and current turned on before issuing a certificate of inspection if considered necessary.

OTHER BY-LAWS

8 If in any section this By-law shall apparently conflict with any other By-law of the City of Edmonton then the intent and purpose of this By-law shall be enforced.

DONE and PASSED in Council this thirtieth day of November, A.D. 1917

W. T. HENRY,

Mayor

CHAR. RO. K. COX,

City Clerk

(SEAL)

ELECTRIC LIGHT AND POWER DEPARTMENT

INSPECTION BULLETIN No. 1 (1922) ELECTRIC
WIRING*(Amended March 9th, 1923.)*

This bulletin is issued by the City Electrician of Edmonton, Alberta, for the information of wiremen, contractors and others in order to ensure uniform interpretation of the rules, and is hereby enforced, as is in accordance with clause 2(b) of the Electrical By-law No. 20, and supplementary to that By-law, which also see for general rules and information. All previous bulletins are hereby cancelled.

OUTLETS FOR CIRCUIT

MAXIMUM OUTLETS PER CIRCUIT FOR
NEW WIRING

1. The following list is the maximum number of outlets which will be allowed on one circuit for the classes of work specified.

If the number of outlets herein specified would cause the known load of any such circuit to exceed the wattage allowed by the National Electric Code then the number of outlets must be reduced accordingly.

OVERLOADING CIRCUITS

2. Or if at any later period the load exceeds the allowable amount then the wiring must be changed to reduce the number of outlets per circuit.

CONCEALED WIRING

3. Within First Class Fire District

(a) Applying to those sections of the wiring as herein specified ceiling lights of any portion of the buildings which could be used as public meeting halls, churches, or public stores, and dis-

play windows, showrooms, cafes, pool rooms, and similar business with public space,

Two (2) outlets per circuit.

(b) Same classification as "Clause A" in all other fire districts.

Five (5) outlets per circuit.

The following apply within any fire district

(c) Wall plugs in office buildings one (1) plug outlet allowed per circuit.

(d) Private residences, bedrooms in hotels and rooming houses, warehouses and factories (except office portion) buildings or portions of buildings not specified in any other clause herein,

Ten (10) outlets per circuit.

(e) Show windows. Each window to be on a separate circuit.

(f) Show window in outline work only or interior decorative lighting.

Twenty-five (25) outlets per circuit.

(g) Exterior decorative lighting and signs,

Sixty six (66) outlets per circuit.

SPECIAL CONDITIONS

4. Any special conditions not covered by this list shall be subject to the decision of the Chief Inspector who will give a ruling according to circumstances and based on the National Electrical Code.

SERVICES AND MAIN SWITCH

LOCATION AND HEIGHT OF SERVICE OUTLETS

5. (a) All feeds must be brought out of building at the nearest accessible point to the permanent location of the outside line wires and carried up to a height not exceeding twenty-five feet from the ground and completed with an approved type F. conduit.

(b) In case of low buildings this point must

not be less than twelve feet from ground and a solid bracket or support must be constructed for the service wires whenever necessary. This will be considered as part of the wiring and the Electrical Contractor is responsible for the completion of this portion of the work before the job can be passed by the Inspector.

(c) The exact location of lighting feed wires for buildings containing twenty or more outlets and the location of all three phase power feeds must be determined by the Inspector.

(d) For location in the First-Class Fire Limits see Section 6, Clause 2, of By-law No. 20.

SIZE OF FEED WIRES

6. See National Electric Code 1920, Section 18.

LENGTH OF FEED WIRES

7. A minimum of two (2) feet of wire must be left on outside of building to connect to the City service.

LOCATION OF SERVICE SWITCH

8. See National Electric Code 1920, Section 20b and 24a.

HEIGHT OF MAIN SWITCH AND CUTOUTS

9. Main switch or cutouts shall be placed with in seven (7) feet from the floor. See also National Electric Code 1920, Section 23a.

10. All three-wire single phase installations, when wired in conduit, shall have the neutral wire grounded to the switch box.

This shall be by means of a piece of No. 8 R. & S. wire, or larger as required for the system properly soldered into the neutral lug at the point where the feeds enter the switch, ahead of the fuses. The other end of this ground wire shall be properly soldered into a lug securely bolted to the metal switch box.

WALL BRACKETS

10. Wall brackets or eye bolts for service wires on all except frame buildings must be installed by the contractor. Any such material required will be supplied by the Department on receipt of an order signed by the Inspector.

METERS

11. Inside the first class fire districts. All store meters shall be in cabinets and there shall be a minimum of two meter loops for each store, i. e., general lighting and window lighting.

Any fire district:

(a) All meter loops must be wired according to approved blueprint issued by City Electrician. Single phase loops to be four (4) wire, load on right, line on left, no shunt taps allowed. Three phase loops to be four wire and a shunt tap.

(b) The minimum length of available connecting wire for meter loops is as follows. Single phase two (2) or three (3) wire meters eight (8) inches, all three phase loops eighteen (18) inches.

(c) Must not be installed in locations subject to extremes of temperature, moisture or vibration.

(d) Space in front must be kept from obstruction.

(e) In residences must be located in kitchen or close to rear door.

(f) In stores, etc., must be located to be reasonably accessible at all times, and as near as practicable to the point where the service enters the building.

(g) All meter loops for meters other than those installed in cabinets must be in conduit and finished with an approved E conduit. Centre of loop to be at least six inches from side of cabinet.

(h) Unless installed in cabinets, must not be

less than six (6) feet and in no case more than seven (7) feet from floor.

(1) Where more than four meters are required on one floor of a building they shall be grouped in a metal cabinet.

(j) Where meters are grouped in cabinets a minimum clear space of 10" length by 10" width by 8" depth must be allowed for each meter.

(k) All connections in cabinets to conform with approved blue print issued by the City Electrician.

(l) All circuits and meter loops shall be properly designated by neatly painted letters or numbers visible at all times corresponding to the rooms which they supply. This must be done before meter will be installed.

(m) Provision must be made for proper illumination of the interior of metal cabinets.

(n) No person is permitted to move a meter or change the connection to a meter except which controls service wires or connection in existing meter, cabinets without special permission from the Inspector.

(o) The breaking of the Government Seal on a meter is an offence under the Dominion Electricity Inspection Act for which the penalty is a fine of twenty-five dollars (\$25.00) for each offence.

(p) Special instruction regarding necessary cabinet space for meters must be obtained from Inspector for installation in any of the following cases:

100 amp	110-220 Volts, single phase or over
40 h.p.	220 Volts, three phase or over
100 h.p.	550 Volts, three phase or over
All	2300 Volts connections.

CUTOUT CABINETS

12. Minimum size of box allowed is to measure 10"x12"x4" Every cutout box shall spare space

so that an additional double branch cutout can be installed at a later date if required, except in case of shacks where a minimum size box of 8 x10"x4" will be allowed.

FUSES

FUSES ON METER LOOPS

13. All meters shall be fused on both the line and load side and so arranged that all wires of meter loops are "dead" when meter is removed.

FUSES AND RISERS

14. Risers or subfeeds supplying more than one panel must be so fused at each panel that trouble on busbars of one panel will not affect the others.

NEUTRAL FUSES

15. See National Electric Code 1920, Section 23a and "b" which requires the neutral or control fuse to be omitted on three wire single phase installation, but three wire fuse blocks and switches to be installed. (Not two wire 220 volt)

See also Section 23d which requires all two wire branch circuits to have both fuses installed.

THREE WIRE

2-WIRE FEEDS AND ALSO MOTORS LARGER THAN $\frac{1}{2}$ H.P.

16. (a) Motors larger than $\frac{1}{2}$ h.p. must not be connected on 110 volts.

(b) All single phase motors from $\frac{1}{2}$ to 3 h.p. must be connected for 220 volts.

(c) All motors larger than 3 h.p. must be three phase.

(d) Not more than five (5) lighting circuits or 3300 watts to be connected on 110 volts but must be properly balanced across 110-220 three wire, or 220 volts two wire.

LIGHT AND POWER IN SAME CABINET

17. Three phase power and single phase lighting installations will not be allowed in one cabinet. Separate cabinets must be used for each.

WIRING OUTLETS IN CABINETS

18. All conduits or other apparatus must be so spaced in the cabinet that there will be a wiring space or gutter around the outside edge of a minimum of two inches and between each individual block or not less than one inch. Space must be measured in the clear, i.e., beyond any projecting conduits or bushings. This wiring gutter must be proportionately increased where the number of wires may require same.

See also National Electric Code Section 70d-6.

"LIVE" TERMINALS

19. Conduit work. Each outlet box where the circuit is "live" and a fitting is not installed to have ends of wires properly taped and a blank metal cover on box. Other work. "Live" ends must be completed to a rosette or other suitable fittings.

GROUNDING NEUTRAL

19. See Clause 9-a.

CONDUITS

20. Double lock nuts must be used at all outlets.

Fixture studs to be placed in all outlet boxes where it is possible to install fixtures.

See also National Electric Code 1920, Section 28-F.

CONNECTION OF CONDUIT WIRING

21. All outlets on conduit work must have the wires properly connected and ready to attach fittings before the wiring will be accepted as satisfactory.

OUTSIDE CONDUIT WORK

22. All outside conduit work and interior underground conduit work to have joints leaded and fittings made waterproof by use of rubber gaskets. Condulets are not approved when installed underground, as for example, where the feeds enter a basement from an overhead service.

OUTSIDE SERVICE

23. In case of power installations of 25 h.p. or larger the conduit carrying the feed wires from main switch to outside of building must be sealed with some moisture proof composition at outside and to prevent condensation within the pipe. Unless this conduit enters the building underground a small hole shall be drilled at the lowest point to allow for drainage.

GENERAL**CORD**

24. Flexible cord must hang free in the air from the ceiling support for its entire length unless protected by approved metal armor covering. This ceiling support must not be more than one (1) foot from the rosette or outlet.

See also National Electric Code 1920, Section 32-D.

FITTINGS NEAR GROUND OR MATERIAL

25. In all places where it is possible for a person to make accidental ground connection all metal electric fittings, cabinets, conduit or other apparatus must be properly grounded or in the case of fittings a non-conductor such as porcelain may be substituted.

WIRING DETAILS

26. (a) Screws must be used for knobs or cleats.
(b) Wires to be knobbed at top and bottom of

partition, i.e., below the top plate and above the mud tube (which must be installed).

(c) A.J wires to be completed to an outlet or knob.

(d) Knob and tube wiring to be enclosed in room in two inch partitions.

(e) Loop must not be used where subject to moisture.

(f) All pieces of room must be properly anchored at each end.

(g) Knobs are not to be placed on header boards at outlets.

(h) Horizontal runs on knob and tube work must be properly protected.

(i) All motor wiring to be in conduit.

(j) The neutral wires in both two and three wire installations must be marked at all points of connection, viz., feed wires outside of building, connections to main switch, meter loops and cutouts.

(k) The displacing of the neutral wire for the purpose of clearing a ground is strictly forbidden.

(l) All residences to have iron plug in kitchen. Where residence has five or more rooms plug must be on a separate circuit.

(m) In residences both sides of a circuit to be wired into basement for future connection of plugs, etc.

LANK FUSES

27 Lank fuses are not approved

UNDERGROUND CONNECTORS

28 Wires installed underground must be lead covered and placed in ducts or conduit, or otherwise specially designed for use underground.

MOTOR VOLTAGE

29. The City reserves the right to specify the type and voltage for all motor installations, also

the right to refuse applications where service is not available

POWER LINES

30. Before installing wiring for motors information should be obtained from the City Electrician as to class of power available at the desired location

ELECTRIC RANGES INSTALLATIONS

31. (a) In old buildings, with existing wiring for lighting, gas electric range installations may be treated as independent.

(b) The feed wires shall be brought out of the building so they may be connected to the existing aerial lighting service wires for that building, providing that this does not require considerable additional wiring.

(c) In all cases the feed wires must be brought out of the building at a point convenient to the electric light poles, so that the aerial service wires can be carried direct from the pole, clear aerially, to the point of connection to the feed wires.

(d) Knob and tube wiring in basements for use for electric range is permissible by the by law but proper mechanical protection must be provided. The details of protection required are at the discretion of the Chief Inspector.

(e) The Chief Inspector shall decide any cases where the proper location for feed wires may be questionable and he is prepared to visit the locations for this purpose when necessary, before installation is commenced.

INSTALLATIONS

32. Any person violating or disregarding the provisions of this instruction bulletin and By-laws No 18 and 20, shall be liable to cancellation or

suspension of license in addition to such penalties provided by the above mentioned By-laws.

(Signed) W. J. MURPHY,

Superintendent

January 1922.

Revised March 1922.

Civic Block, Edmonton

CITY OF EDMONTON
ALBERTA

ELECTRIC LIGHT AND POWER DEPARTMENT

BULLETIN No. 1-A (1922)

Regulations Regarding High Voltage Installations
(PRIMARY SERVICE AND TRANSFORMERS)

This bulletin is issued by the City Electrician of Edmonton Alberta, for the information of wiremen, contractors, and others in order to ensure uniform interpretation of the rules and is hereby enforced, being in accordance with clause 2 (b) of the Electrical By-law No. 20 and supplementary to that By-law, which also see for general rules and information. All previous bulletins are hereby cancelled.

GENERAL MEMO

The City Electric Light Inspection Department desires at all times to co-operate with architects, electrical contractors and others in order to establish a first-class standard of high voltage electrical construction and towards this end invites

enquiries for information regarding design, or for details of the regulations governing this class of work.

BLUE PRINT

Blue prints of typical primary service installations may be seen at the Electric Department's office on request.

PLAN TO BE SUBMITTED FOR APPROVAL

(a) A plan must be submitted to the Department's Electrical Inspector and approved before any construction work is commenced on transformer vaults or other enclosure for primary voltage installations. Such conditions also applying to the entire electrical layout of some

SERVICE CABLE AND METER HOUSE METER

(b) Primary watt-hour meter and meter transformer are supplied and installed by this Department but the contractor or other interested party must supply and install all other equipment including transformers, service cable and a metal meter rack all construction to be in accordance with the Department's standard requirements. Dimensions and Blueprint of such standard meter rack may be obtained on request.

INSTALLING PRIMARY CABLE

(c) The primary service cable must be supplied by the contractor of sufficient length so that it can be carried up the service pole and to meter end of cross-arm (as required by the Alberta Electrical Protection Act Regulations) to connect to wire on primary cross-arm. Such cable shall be installed by the contractor to the foot of the pole, but will be installed on the pole by the Department as referred to in clause (e).

LIMIT OF DEPARTMENT'S WORK

(d) The Department's work, at its own expense is limited to connecting the end of this cable to the primary cutouts on the primary

cross-arm, also connecting the primary watt-hour meter and meter transformers.

WORK ON POLE

(f) The contractor will be responsible to the Department for the labor expense of installing this cable on the pole, also for supplying and installing poleheads if required.

PROTECTION OF CABLE

(f) If armored cable is not used, the contractor shall supply approved conduit or other necessary protection for the lead covered cable, also supply poleheads if required.

WORKING ON DEPARTMENT POLES

(g) All work on Department poles shall be carried out by this Department and it is prohibited for any person except the Department's authorized employees to work on such poles or to interfere with the Department's primary circuits.

METER LOCATION

(h) Watt-hour meters must be installed under such conditions that they can be read without it being necessary or possible for meter readers, or others, to accidentally make contact with high voltage wires or apparatus.

In some cases this may require either a special window or door opening in the wall, or it may require extension of the meter secondary wires (No. 8 R. & S.) by the contractor to a location outside of the transformer vault not exceeding twenty five feet from the meter transformer. Such extension of meter secondary wires shall not be made without special permission being obtained from the Department's Inspector.

SCREEN FOR SECONDARY APPARATUS

(i) Where a vault or room is not used exclusively for high voltage apparatus, i. e. where secondary switchboard or distribution cabinets are installed in the same room as approved metal

screen must be erected to prevent accidental contact with the high voltage apparatus (see also Alberta Electrical Protection Act Regulations, 1920, Sec 70, Page 41). A reasonable space, to the approval of the Department's Inspector, must be left around the meter rack to enable meter inspectors to work on same.

WIRING DETAILS

(j) All exposed primary wires, unless lead covered cable is used, shall be entirely enclosed in non.

All secondary wires shall be entirely enclosed in conduit.

Secondary wiring not in conduit must be limited to the shortest length possible, only sufficient will be allowed to make the necessary connection to transformers, meters, etc. Such exposed wiring shall be properly cabled where possible, laced and painted, turns neatly bent square, and the whole installed in a workmanlike manner to the approval of the Department's Inspector.

The ends of all conduit and cables shall be properly finished with an approved pothead or some equally approved method.

ALBERTA ELECTRICAL PROTECTION ACT

(k) In addition to the foregoing, the Alberta Electrical Protection Act (Regulations) also apply to this class of installation. In particular see the following sections. (1920 edition) —

Section 51, Page 38—Vaults to be illuminated.

Section 52, Page 39—Grounding apparatus and framework also oil cutouts, if installed.

Section 53, Page 40—Two switches required, one of which shall be an oil switch and the other a disconnecting switch (or oil cutout.)

Section 69, 70, Page 41, and 75, Page 42—
Guarding live parts by elevation or suitable covers.

Section 72, Page 42—Identification of circuits.

Section 78, Page 43—Illumination of vaults, etc.

Section 80, Page 43—"Danger" or "High Voltage" signs required.

NATIONAL ELECTRIC CODE REQUIREMENTS

(i) The "National Electrical Code" regulations also apply. In particular see the following sections (1920 edition) —

Section 11, Page 24—General regulations for transformer vaults, etc.

Section 13 (b), Page 31—Grounding neutral point of single phase lighting transformers.

Section 44, Page 146—Regulations for high voltage wires.

Section 4a, Page 131, 132, 133—Special permission required to place transformers in buildings other than power stations.

Locations of transformers to be as near as possible to the point where primary wires enter building.

Enclosure required of fire resisting material with door securely locked.

Vault to be thoroughly ventilated to outside air or suitable flue.

Transformer case, etc. to be grounded.

Suitable drainage required.

Door sill at entrance.

OUTDOOR PRIMARY INSTALLATION

(ii) Under certain special conditions where not practicable to make the primary service and transformer installation in the interior of buildings, permission may be granted for the entire primary installation to be made outdoors on a pole platform. All such work to be carried out by this Department at the expense of the con-

tractor or other interested party Estimate regarding cost will be supplied on request.

Under the above conditions the secondary wires of the primary wall-hour meter shall be carried in conduit to a suitable location for the meter in the interior of the building or to other approved place. Such distance not to exceed twenty-five feet from the meter transformer, No. 8 B. & S. wires to be used.

The work to be carried out at the Department's expense is limited to supplying and connecting the Department's primary cutouts on the primary cross-arm and supplying and connecting the wall-hour meter and meter transformer.

Disconnecting switches and cut out switch may be required, similar to interior installations, if thought necessary by the Inspector.

BLUEPRINT

A blueprint of typical outdoor pole type primary service installations may be seen at the Department's office on request.

(Signed) W. J. McENERY

Superintendent

January 1922.

Civic Block

Edmonton.

RE-NUMBERED BY-LAW No. 3, 1922

*(By-Law No 47, 1921)***A By-Law Respecting the Examining and Licensing of Electrical Contractors and Journeymen Electricians.**

The Municipal Council of the City of Edmonton, duly assembled, enacts as follows —

DEFINITIONS

1 In this By-Law all expressions unless otherwise requires

(a) "Commissioners" shall mean the Commissioners of the City of Edmonton

(b) "City Electrician" or "Inspector" shall mean and include the City Electrician of the City of Edmonton, the Superintendent of the City of Edmonton Electric Light and Power Department or any of his duly authorized assistants.

(c) "Contractor" shall mean and include any person, firm or corporation having a regular place of business within the City of Edmonton, who either himself or by the employment of journeymen makes commercial contracts to perform the work of installing wires, conduits, apparatus, fixtures, and other appliances for the carrying or using of electricity for light, heat or power purposes, within the meaning of this By-Law and no electrical permits as provided in Wiring By-Law No 20 Section 3 (1) or amendments therein or substitutions therefor shall be issued to any other persons.

(d) "Journeymen" shall mean a person who does work in installing, repairing or making alterations to wires, conduits, apparatus, fixtures or other appliances for the carrying or using of electricity for light, heat or power purposes within the meaning of this By-Law, for hire, and

such journeymen shall have had at least four years' electrical experience relative to work of a journeyman electrician.

(a) "License" shall mean the certificate of qualification issued to a contractor or journeyman under the provisions of this By-law.

SCOPE OF BY-LAW

3. The provisions of this By-law shall apply to all new electric installations and every alteration or addition to existing ones and to all contractors, journeymen and inspectors engaged in or carrying on within the City of Edmonton the business of placing, installing, maintaining, repairing, replacing or inspection in or on any class of structure and conduits of any description designed for the purpose of enclosing or carrying an electrical conductor or placing, installing, maintaining, repairing, replacing or inspecting in or on such structure of any conductor switch attachment fitting or any element whatsoever of any equipment designed for the purpose of supplying such electrical service or for any purpose in connection with such an electrical service.

DOES NOT APPLY TO MUNICIPAL DEPT'S.

3. The provisions of this By-law shall not apply to such work within the power house, substations or other places wherein the business of generating or distributing electrical power is carried on by the municipal departments and where such work is installed by employees under the direction of officers of such municipal departments except in structures wherein the public other than employees of such municipal department, have free access on business.

DOES NOT APPLY TO MUNICIPAL STREET RLY.

4. The provisions of this By-law shall not apply to such work on street railway cars or locomotives.

tives, or on railway cars or locomotives which are the property of the municipal departments and where such work is installed by employees under the direction of officers of such municipal departments.

APPRENTICES AND HELPERS

5. No person not licensed under this By-law shall perform any electrical work or install any electrical material or appliances without the meaning of this By-law, except as an assistant is in the presence of and under the direct personal supervision of a journeyman continuously employed on the same contract or job and licensed under this By-law.

ALLOWS REPLACEMENT OF LAMPS, FUSES, ETC

6. Nothing in this By-law shall be taken to apply to the insertion of incandescent lamps in sockets or receptacles, or the replacement of such lamps, the carboning, trimming or operation of arc lamps, the lawful connection of utilization equipment to supply by means of attachment plugs or the use or operation of the same or the lawful replacement of fuses controlling circuits or equipment.

BOARD OF EXAMINERS

7. There is hereby created a Board of Examiners for journeymen electricians which Board shall consist of the City Electrician for the City of Edmonton, one master electrician and one journeyman electrician both of whom shall be chosen by the City Commissioners from time to time. The City Electrician shall be Chairman and Convener of this Board.

POWER OF COMMISSIONERS

8. The Commissioners of the City of Edmonton shall make regulations for

NO POWER TO DELEGATE

(a) The examination of candidates for journey men's licenses, the granting of licenses and evidence to be furnished by candidates for contractors or journeymen's licenses as to previous experience,

(b) Determining time and duration of licenses and their renewals,

(c) Prescribing causes for which a license may be revoked, cancelled or suspended,

(d) Defining the duties of inspectors and making rules governing their operations.

CLASS OF LICENSES

9. Three classes of licenses shall be issued, designated as follows:

(a) Class A, which may be given to a journeyman having at least four years' experience, and who, after passing his examination successfully and complying in every respect with the prescription contained in the forms prepared by the examiners, has paid the fee prescribed by this By-law.

(b) Class B, which may be issued to any person who has satisfactorily passed the examination prescribed for journeymen electricians and holds or is qualified for a journeyman electrician's license under sub-section (a) hereof and has filed an application to be registered as a contractor in the City Electrician's office and paid the fees prescribed by this By-law, or which may be granted to any company, association, corporation or firm doing or wishing to do business as contractor for electrical installation, provided one of the members of the said association, company, corporation or firm, or at least one person in its employ, holds a journeyman electrician's license given by the examiner's, and has registered as a

contractor, and that the fee for the contractor's license has been paid.

(c) Class C which is the special license authorizing a manufacturer firm or corporation other than an electrical contractor to regularly employ at all times for their own purposes an electrician holding a journeyman electrician's license.

EXAMINATION FEE

10. Every person desiring to pass an examination as a journeyman electrician or applying for a contractor's license shall apply in writing to the examining board. Each application to be accompanied by a fee of Five Dollars (\$5.00), said fee to cover expenses incurred by examining board and applicants must pay prescribed fee for each application or examination. The board shall fix the date of the examination and notify the various applicants.

TEMPORARY PERMITS

11. Temporary permits may be issued by the City Commissioners to any applicant between date of examination provided the City Electrician considers the applicant qualified and said applicant fills in and signs the regular application form and pays the fees for examination and license. Such temporary permits will automatically terminate on the day after date of the first examination after issuance and are not renewable.

SCOPE OF EXAMINATION

12. The examination may, at the discretion of the board, be partly or wholly in writing, include plans and shall consist of questions on the following subjects:

- (a) The National Electrical Code.
- (b) The City Electrical By-laws.
- (c) General Electrical Theory, as applying to the work of a journeyman electrician.

(d) Practical Electrical Work, as applying to the work of a journeyman electrician

MARKS FOR EXAMINATION

One hundred marks shall be the total applied to each section. A candidate who receives 75% of the total marks in sections (a) and (b) respectively and 80% of the total marks in sections (c) and (d) respectively shall be deemed to have passed a satisfactory examination and shall receive a certificate from the board to that effect. A candidate who receives less than this minimum set percentage in any one section shall be deemed to have failed to have passed a satisfactory examination.

SPECIAL PERMITS

13. In certain special cases at the discretion of the Commissioners, temporary permits may be granted to a journeyman electrician who has failed to obtain the necessary marks in section (b) of clause 12 hereof (City Electrical Rules), but is otherwise qualified. Such permits may continue for a limited period only as the Commissioners consider necessary and will depend to a great extent on reports from the City Inspector on the applicant's work and his own efforts to familiarize himself with the City Electrical Rules.

APPLYING FOR LICENSE

14. Each successful candidate on presenting to the City License Inspector the Board's certificate and providing the license fees have been paid, shall receive the necessary license.

LICENSE FEE

15. License fee for contractors, Class "B", shall be \$25.00 per year and for journeyman electricians, Class "A," One Dollar (\$1.00) per year. Manufacturers permit, Class "C," \$5.00. A contractor's license may be transferred on payment of \$1.00.

DATE LICENSE EXPIRES

16. All licenses shall expire on the 31st day of December of the year in which they are granted.

CAUSE FOR CANCELLING LICENSE

17. The license herein provided for may at any time be cancelled for incompetency, dereliction of duty, fraudulent use thereof or for any other proper reason by the Commissioners upon recommendation of the City Electrician and after due enquiry. The Commissioners, upon the revocation of any license shall forthwith notify the Inspector of Licenses and the person, firm or corporation whose license is revoked.

APPLYING FOR LICENSE AFTER CANCELLED

18. Any person who has or had his license cancelled as aforesaid may at any time after the cancellation thereof apply to the License Inspector for the issue of a new license, but no new license shall be issued until such person shall produce to the Inspector of Licenses a letter from the Commissioners that the said person has satisfied them that the said applicant is a properly qualified person to have a new license.

PENALTY IN CASE OF CONTRACTING WORK
ON LICENSE

19. Upon any complaint being made to the Commissioners that any licensed contractor has been lending his name to any unauthorized person to evade the provisions of this By-law or to carry on the business of electrical contracting contrary to the provisions of this By-law, the Commissioners shall enquire into the matter and if they find the complaint well founded may cancel the offender's license. The Inspector of Licenses shall be notified of such action and no new license shall be issued to such person for one month from the date of the cancellation of said license.

EXHIBITION, CIRCUS, ETC.

20. In the case of a circus, exhibition or other similar business exhibiting or carrying on business within the City for a period not exceeding seven days, the City Electrician may issue a special permit to the electrician thereof for any period not exceeding seven days, provided he is not regularly employed or living within the City, which permit shall designate the premises or location upon which such electrician shall carry out his work, and his work shall be confined thereto. Upon such permit being issued the person named therein shall be absolved from complying with the preceding provisions of this By-law.

STEAM ENGINEER'S LICENSES

21. Notwithstanding anything hereinbefore contained, the possession of a first, second or third class certificate limited to not less than 100 horse power, issued under the provisions of "The Boiler Act" of Alberta shall entitle the holders of any such certificate to perform the work of a journeyman electrician as described in this By-law in or about the premises wherein he is employed as a stationary engineer, but not elsewhere.

22. By-law No. 13 of 1919 and all other By-laws or parts thereof inconsistent with this By-law are hereby repealed.

DONE and PASSED in Council this Twenty-third day of January 1922

D. M. DUGGAN,

Mayor

CHAR. ED. K. COX,

City Clerk.

(SEAL)

*Extracts from Waterworks By-law No. 17 (1917)
and from Departmental Regulations.*

INSTALLATION OF WATER SERVICE, CITY PART

4 All applications for the installation of water service from the City water mains into any lands, lot or premises must be made at the office of the Waterworks Department on the prescribed application and agreement forms, which must be signed by the owner or his authorized agent and the applicant undertakes to connect up to and make use of this service within a period of three months from date of completion of the City's portion of the service to the property line. Failing to do this, the Water Works Department after the expiration of the said three months, has the right to make a minimum charge per month as per the Water Works Tariff regulations.

5 Only one water service shall be supplied to any one building for any other purpose than fire protection.

6 The Waterworks Department will install free of charge the standard size of service from the water main to the property line. The standard size of water service is three-quarters (3/4") of an inch for residences and one (1") inch for business blocks.

8 Every application for water or sewer services received by the Waterworks Department from November 15th to April 1st, inclusive, shall be charged for according to "frost rate," and the applicant shall pay the difference of said "frost rate" over and above the ordinary summer average cost before construction work is commenced, and shall deposit with the said de-

part need such sum as the Superintendent shall consider necessary to cover such extra cost.

§ Every temporary water service or pipe laid on or near the surface of the ground for construction or any other purpose shall first be approved by the Superintendent, and the total estimated cost of installing and abandoning same shall be paid for before the construction work on the service is commenced.

10. When any existing sewer or services become inadequate, and more water is desired the former service or services shall be removed or abandoned and all water required shall pass through the larger service installed.

11. In all cases the City water service pipe will be laid at right angles to the property line at the point of entrance, and at a depth to be decided on by the Superintendent.

12. No water service shall be installed except into property abutting on street or lane on which a water main is laid and which is assessed for the Water Frontage Tax.

INSTALLATION OF SERVICE PRIVATE PART

13. All water service pipes shall be laid at a depth of not less than seven feet and not more than eight feet below the established grade at the property line, and shall not at any point between the property line and the inside of basement wall be less than six feet below surface of the ground.

14. No water service shall cross a sewer service at or near the property line and all water services shall be kept at least nine inches from sewer services at the street or lane line.

15. Every service pipe from private property shall approach street or lane line at right angles and shall end not further than eight inches from street or lane line.

16. When two or more services are placed in one trench they shall be on the same plane at street or lane line and not closer together than nine inches nor further apart than sixteen inches.

17. When two or more adjacent buildings are being served by separate services in one trench, such service pipes shall be placed in uniforms and rotation to correspond with the buildings served and no crossing of pipes in the trench shall be permitted.

18. Malleable iron caps shall be screwed on ends of all service pipes where City is to make connection to same.

19. No pipe shall be connected up to the Waterworks Department if any wood, paper, raku or other plug is found in the end of such pipe until the same has been removed by the applicant for the service and the end of service pipe left in good order and the Waterworks Department satisfied there is no obstruction.

20. Separate water services into any premises shall not be interconnected in any way either above or below ground.

21. A stop and waste cock shall be provided on services one 1 1/2 inch and under, and placed in position specified in clauses governing installation of meters and shall be always kept in good working order.

22. When the building to be supplied with water has a basement or partial basement of whatever size or wherever located, the pipe shall enter the building through said basement and have meter chamber and stop and waste cock installed therein.

23. When the building to be supplied with water has no basement or excavation of any kind under street or main floor, a valve or stop and waste cock shall be installed on water service immediately inside the wall of the building and

an extension handle to operate same shall be securely fastened to said valve or stop and waste cock and extend protected by a casing to surface of floor and be accessible at all times.

24. Plumbers shall examine all water pipe that is to be laid underground and make sure that the flow of water will not be interfered with by any flow or obstruction in the pipe or by clay or any solid matter while pipe is being installed.

25. Where any failure or interruption of service is complained of the person requiring the ground to be opened for investigation of the cause of such interruption or failure shall deposit with the department the amount estimated as the cost of such investigation and if it is found that the flow at the property line corresponds to the size of service no refund shall be made but if the interruption is found to be on the City's service the amount so deposited shall be refunded.

26. Where the outside wall of the building to be served does not come to the property line abutting on the street or lane from which the service is to be taken the private portion of the service pipe line shall be first completed up to the property line before the Waterworks Department shall connect thereto.

27. In all cases where a water service has been newly installed and in all cases of reconstruction alteration or repair of any building where new or additional water service or fixtures have been installed City water shall not be turned into such service until all charges for water used on the premises for any purpose shall have been paid and the service finally inspected by the plumbing Inspector and certified by him to be in conformity with the By-laws of the City.

28. The owner or agent shall notify the plumbing Inspector as soon as any water service or fix-

lores are ready for inspection, who shall inspect the same and report in writing to the Superintendent of the Waterworks Department that the work on such premises has been approved by him.

29 Every water pipe laid inside the property line on any premises shall be left exposed in the trench until inspected by the Plumbing Inspector and when he has approved of same the pipes shall be properly covered by the owner or his agent.

SPECIAL SIZE SERVICE OVER ONE INCH AND UP TO SIX INCHES

30 In all cases where the building is to be supplied with any special size service has a retaining wall abutting on the property line the Waterworks Department will construct the service to the inside of such retaining wall. In cases where permission has been granted to extend basement under city sidewalk the Waterworks Department will complete installation of service only to the inside of the extended basement retaining wall. An opening for service pipe must be left in the retaining wall at a depth satisfactory to the Superintendent and of a size at least six inches larger in diameter than the outside diameter of the service pipe line.

31 When fire and domestic services are applied for at same time the applicant shall state size of combined service, as well as size of domestic service required and the Waterworks Department will install the combined services in one to the inside of retaining wall. The branch for the domestic service shall be taken off the combined line immediately inside the retaining wall and a gate valve or stop and waste cock shall be placed on the domestic line as close to the fire line as practicable.

37. No service pipe shall be installed through any unfinished retaining wall or into any un-completed basement, unless the applicant shall waive in writing any claim for damage that may occur due to the displacement of any temporary blocking and support to service pipe.

38. Provision shall be made by applicant or plumber for the installation of a meter on all water services.

39. No branch line of any kind shall be taken off the service pipe line between the meter and the City Curb Cock.

40. Every water consumer shall give every facility for the introduction of water meters and shall protect the same from frost or other damage when placed upon his premises by the Water-works Department, and shall at all times properly and efficiently protect the service pipes and fixtures upon his premises leading to or connected with said meter from frost or other injury.

OPERATION OF CITY VALVE, HYDRANT FIXTURES, ETC.

41. Every service from the City mains or from other service pipes to the property line, including a service or curb-cock to be placed about one foot from street or lane line shall be installed, maintained and operated by the City. Where areas have been excavated under the sidewalk the service pipes shall be laid by the City only to the inside of the area wall. The property owner must install and maintain at his own expense all service pipes and all plumbing within his own premises.

42. No person shall open or shut any street or curb cock, or in any wise tamper with or injure any meter, valve or service pipe connecting any premises or building with the City water supply, unless such person be a regular employee of the

Waterworks Department, and have authority to do so, or a regularly licensed plumber, who may open or shut the street curb cock in order to make necessary repairs or to test his work, and in every case he shall leave the curb cock as he found it.

48. No unauthorized person shall knowingly have and keep in his possession or under his control any curb cock key, valve key or fire hydrant wrench of the City water supply system and no person shall, without authority from the Superintendent make, construct, buy, sell or in any way dispose of to any person any such curb cock key, valve key or hydrant wrench.

49. No person, not being duly authorized by the Superintendent, shall in any way interfere with, operate or attempt to operate any fire hydrant, gate valve or other fixture of the Waterworks distribution system.

50. No person shall obstruct the access to any fire hydrant by placing around, thereon or within twenty feet thereof any stone, brick, lumber, dirt, rubbish or other material or willfully or carelessly injure same, or fill up or cover any curb box, valve box or in any manner tamper with or injure same.

51. For operating the City curb cocks, licensed plumbers are required to provide and use only such keys as shall be approved by the Superintendent, which shall be made of three-quarters of an inch steel and properly welded at bottom socket. The total cost of repairing any damage or removing any obstruction to curb cock or service box caused by carelessness or improper use on the part of the plumber operating same shall be paid by the person responsible.

WATER TARIFF

56. The rates for water supplied by the City shall be as set forth in the Waterworks Tariff as recommended by the Commissioners and approved by the Council. Building rates are as follows:

Each 1,000 bricks	10c
Each 100 cubic feet in wall of rubble or random coursed ashlar masonry	10c
Each 100 cubic feet in wall of coursed masonry	10c
Each cubic yard of concrete	10c
Each square yard of lime plaster	4c
Each 100 square feet of Terra Cotta	5c
Each square yard of wood fibre plaster and stucco	4c
Steam Boilers used in construction per week	\$1.50

These rates are payable at the Building Inspector's Office at the time the building permit is taken out.

62. Application either for the turning off or for the turning on of the water shall be made in writing at the Waterworks office during office hours, and upon the required forms.

64. When a house is vacated, the stop and waste cock inside the premises shall be turned off by the party leaving the house, or by the owner or his agent.

68. Where any construction or alteration, or repair work, of any kind is being done on any street, by any City Department or by any contractor working for any City Department, such Department or contractor shall not in any way interfere with, undermine, damage, obstruct or cover up any valve box or chamber, service box, pipe or attachment connected with the Water-

works system. If any alteration or adjustment of any water pipe or fixture should be necessary consequent on such operations, all such alterations or adjustments shall be made only by the Waterworks Department and on reasonable notice from the City Department doing or supervising the work. All costs involved in such alterations and adjustments by the Waterworks Department shall be charged against the Department doing or supervising the work which renders such alterations or adjustments necessary.



BY-LAW No. 49, 1923

A By-law to amend By-law No. 17, 1917 (Waterworks Installations).

The Municipal Council of the City of Edmonton, duly assembled, enacts as follows:

1. By-law No. 17, 1917, entitled a By-law relating to the Municipal System of Waterworks of the City of Edmonton, is hereby amended by striking out section 18 thereof and by substituting the following —

18. (1) All water services between the street and lane line and building shall be constructed with lead pipe.

(2) Lead water pipe shall weigh not less than as shown in the following tables for the respective sizes of pipe:

$\frac{1}{2}$ " diameter	6 lbs. per yard
$\frac{3}{8}$ " diameter... ..	8 lbs. per yard
$\frac{3}{4}$ " diameter	10 lbs. per yard
1" diameter	13 lbs. per yard
1 $\frac{1}{4}$ " diameter	18 lbs. per yard
2" diameter... ..	24 lbs. per yard

(3) The Contracting Plumber installing the service shall leave not less than 2" of pipe extending past the property line with a closed end to which the City will make connection, or if the City service is installed first then the Plumber shall connect this pipe with the City's curb cock, using the brass union to make the connection.

(4) Yard hydrants shall be connected to the curb cock through not less than one foot of lead pipe and four feet of iron pipe. The lead pipe shall be connected to the iron pipe by means of a

lead to iron union. All other water service pipes on private property shall be of lead pipe and such lead pipe shall continue from the property line to the stop-and-waste cock in the basement, in the buildings which have no basement and the stop-and-waste cock must be provided with a key to control it, special provision must be made to secure the stop cock so that the lead pipe will not be in bent if the plug of the stop and waste becomes difficult to turn.

(5) When a yard hydrant is no longer required and the service pipe is to be extended into the house or building the new service shall be continued to and connected with the curb cock at the street or property line.

(6) A lever handled stop-and-waste cock shall be placed on every water service pipe as close to the point of entry as convenient.

2. This By-law shall come into force and effect forthwith after the passing thereof

Done and Passed in Council this twenty-first day of November, A.D. 1923.

(Signed)

D. M. DUGAN,
Mayor

CHAS. ED. K. COX,
City Clerk

(SEAL)

BY-LAW No. 48, 1923

A By-law to regulate and govern the installation of Natural and Artificial Gas within the City of Edmonton and to fix and determine the several materials to be used

The Municipal Council of the City of Edmonton, duly assembled, enacts as follows:

PERMITS

1. Before commencing the construction, alteration or repair of any portion of the gas fitting of any building, an application for a permit for all work proposed to be done shall be filed in the office of the Plumbing Inspector by the Contracting Fitter and if required a plan shall also be filed.

FEES

2. With each application shall be deposited the following amounts to cover the cost of inspection and entering records. For the first run of pipe to the meter, with not over ten (10) outlets, a fee of fifty (50c) and for each outlet above ten a fee of five cents (5c) per outlet.

For each additional run of pipe to the meter a fee of twenty-five cents (25c) shall be charged.

If the work is not ready for inspection when called or not done in accordance with these regulations an additional fee of fifty cents shall be made for each extra visit.

INSPECTION

3. The Plumbing Inspector shall be notified when the roughing in is ready for inspection. All work shall be left exposed until approved.

The Inspector shall examine all work within twenty-four hours after notification. The Contracting Fitter shall notify the Inspector when the work is completed and ready for final test.

No work shall be used or meter attached until inspection has been made and certificate of approval issued.

QUALITY OF MATERIAL

4. All pipes and fittings shall be of the best quality of standard gauge and standard threads, pipe fittings shall be malleable iron or mild steel, split pipe or fittings shall be removed and no cement shall be used in any pipe or fitting for the purpose of repairing or concealing defects. Pipes shall not be painted or covered before inspection is made.

BRANCH OUTLETS

5. All branch outlet pipes shall be taken from the side or top of the running line and never directly from below.

HANCES AND C COCKS AND STOPS

6. All gas cocks shall be provided with a check or stop on key, they shall also indicate whether open or closed. Every gas range furnace, gas grate, gas log or similar appliance shall be provided with a ground plug cock, back of and controlling the burner cock and said cocks shall be installed previous to and subject to the rough test on the system.

GRADING OF PIPES

7. All pipes shall be graded with a suitable inclination towards the outlet or towards the meter, free from traps and no automatic drops will be allowed.

NUMBER OF OUTLETS, LENGTH AND SIZES OF PIPES

8. In all systems of gas piping, repairs, changes or additions to be installed the sizes of pipes shall not be less and the length of pipe shall not be greater in respect of the number of burners

then specified in the following table, except in the case of fuel or power lines or for special purposes

Outlets	$\frac{3}{8}$ "	$\frac{1}{2}$ "	$\frac{3}{4}$ "	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
1	30	50	60	70	100	150	200	300	400
2		27	50	70	100	150	200	300	400
3		12	50	70	100	150	200	300	400
4			50	70	100	150	200	300	400
5			33	70	100	150	200	300	400
6			20	70	100	150	200	300	400
8			13	60	100	150	200	300	400
10				38	100	150	200	300	400
13				21	80	150	200	300	400
15				16	65	120	200	300	400
20					37	60	200	300	400
25					17	42	175	300	400
30					12	30	120	300	400
35					1	23	50	270	400
40						17	70	210	400
45						12	55	160	400
50						8	40	125	300
55							27	80	200
60							20	60	150
100								23	80
125								22	60
150								18	55
175									22
200									21
225									17
250									14

The number of outlets as shown in the left column is the total number of outlets the pipe is to supply. If the exact number is not given the next higher number is to be used. Opposite the number of outlets will be found a figure which is the maximum number of feet of the size of pipe at the top of the column which can be run to supply the said number of outlets. For example, if seven outlets are to be supplied the run to the next section is 12 ft. long. It will be necessary to use the eight outlet figure, in this case the table shows that only 13 feet of $\frac{3}{4}$ " pipe can be used and if the distance is greater a 1" pipe must be installed.

FUEL OPENINGS FOR CENTRAL HEATERS

9. Pipe lines shall be as follows in addition to the preceding table —

Area of Room	Pipe to be computed as equal to following outlets
150 square feet	6
300 " "	7
400 " "	10

(2) Size of pipe to supply heaters —

Heater only for			
4 rooms	Under 75 feet	1 1/4"	minimum
11 to 15 rooms	" 75 "	1 1/2"	
16 to 25 rooms	" 75 "	2 "	
10 rooms	75 to 100"	1 1/2"	
11 to 25 rooms	75 to 100"	2 "	

(3) Size of pipe to supply heater and range —

Heater and range for			
4 rooms	Under 75 feet	1 1/4"	minimum
11 to 15 rooms	" 75 "	1 1/2"	
16 to 25 rooms	" 75 "	2 "	
10 rooms	75 to 100"	1 1/2"	
11 to 15 rooms	75 to 100"	2 "	
16 to 25 rooms	75 to 100"	2 1/4"	

(4) Size of pipe for heating other buildings and for power plants shall be —

Size			25 ft.	50 ft.	100 ft.
S	H	P.	% Min.	1 " min.	1 " min.
10	"	"	1 "	1 1/4"	1 1/4"
15	"	"	1 "	1 1/4"	2 "
20	"	"	1 1/4"	1 1/2"	2 " "
25	"	"	1 1/4"	1 1/2"	2 " "
40	"	"	2 "	2 "	2 1/4"
50	"	"	2 "	2 1/4"	2 1/4"
Size			150 ft.	200 ft.	
S	H	P.	1 1/4" Min.	1 1/4" min.	
10	"	"	1 1/4"	"	
15	"	"	2 "	"	
20	"	"	2 "	"	
25	"	"	2 "	"	
40	"	"	2 1/4"	"	
50	"	"	2 "	"	

ADDITIONAL PIPE LINES

10. New pipe shall not be connected to the general house pipe system after same has been tested and inspected but shall be run to within

eighteen (18") inches of the meter and the gas company notified to make connection with the meter.

If meter is already installed the gas fitter putting in new work shall call for inspection on said work and after receiving the approval of the Inspector he shall notify the gas company in the proper form that same has been tested and inspected and is ready to be connected.

MISCELLANEOUS RULES

- 11 (1) No fixtures or bracket opening shall be less than $\frac{3}{4}$ " and no rising main or cook stove branch shall be less than $\frac{3}{4}$ ".
- (2) All cook stoves, heating stoves, ranges, or any gas stove with oven attachment, and hot water heaters must be provided with flue connections.
- (3) No one but an employee of the gas company shall disconnect either the inlet or the outlet of a meter for any purpose or make any alterations, additions or changes in the service pipes.
- (4) An outlet for the purposes of this by-law shall be estimated to consume 10 feet of gas per hour.
- (5) White lead or other jointing material shall be used sparingly so as not to clog the pipe.
- (6) The main shall be extended to a point within eighteen (18) inches of the proposed location of the meter and to the right of same or thirty inches above floor where there is no basement.
- (7) No gas pipe shall be carried on the underside of the joists of the ground

floor of any building where there is no basement.

- (8) Whenever a union is used it shall be a ground non-corrosive metal faced union, but a union shall not be used in a concealed position.

GRADING OF PIPES, BRACKETS, DROPS OR OUTLETS

12. All pipes shall be graded with a fall and all pipes shall be free from traps, no automatic drops will be allowed.

13. Bracket lines shall be run up from below when practicable.

SUPPORTS

14. All pipes shall be thoroughly supported with lumber or metal pipe hooks or metal straps or both, held in position securely. Outlets which are not in close contact with the studding in the wall shall be supported with a notched 2"x4" cross piece placed between the regular studs and the pipe secured to it.

- (2) A support shall be placed on all bracket extensions or drops directly under the riser or drop ell.
- (3) No gas pipe shall be laid in cement unless the pipe and channel are covered with tar.

CAPPING OF PIPES

15. After the pipes are all run the outlet ends shall be capped with iron caps and in no case shall lead caps be used. All unused ends shall be kept capped.

DEFECTIVE PIPE

16. All split pipe or defective fittings shall be removed and no defective fitting or pipe shall be repaired with cement or lead. No gas filters or cement shall be used except at the fixture joint.

RISERS

17 Risers shall not be run in the outer wall of a frame building wherever it is practicable to place them elsewhere, risers shall not be scattered but shall drop together in alignment to the basement they shall be kept at least three inches below the basement ceiling and not less than three inches apart and not less than ten apart at the meter.

(2) Risers and rising mains shall have a tee at the lower end, and not an ell.

(3) A convenient opening shall be left at the meter end of the riser from which to make a pressure test.

GAS LINES OR CHIMNEYS

18 Fuel gas pipes shall not be made to any fireplace or imitation mantel effect unless said fireplace or mantel is supplied with a fireproof flue, the upper end of which shall extend to the outer atmosphere.

TESTING.

19 The gas fittings in any building shall be tested by the gas fitter under the direction of the Plumbing Inspector, when the roughing in is completed and before the work is covered in a test shall be applied and the work shall sustain a column of mercury 10 inches for fifteen minutes and after all the work is completed and the fixtures are in position a further test shall be applied and the complete installation shall sustain a column of mercury three inches for five minutes, without any additional air being required.

TESTING TUBAGE

20 No test shall be made other than by a smooth bore glass tube mercury gauge open at the top. In no case shall a spring or steam gauge be used for testing.

CERTIFICATE OF FINAL INSPECTION &

21 Under no conditions shall a meter be set by the gas company until a certificate of final inspection has been issued by the Plumbing Inspector in substantially the following terms:

This is to certify that I have examined the gas fittings and fixtures installed by _____ in the building _____ Street and find that the same are installed in accordance with the by-law governing gas fitting in the City of Edmonton, and same is ready for the meter to be set

Inspector of Plumbing

COMBINATION FITTINGS

22. No combination gas and electric fixtures shall be used for lighting purposes.

23. Every service pipe to any building which is to be provided with gas supply shall be provided with a stop-cock placed at or near the property line and so arranged that the gas supply can be shut off at such point.

(2) The service pipe shall be provided with a protective coating of paint or asphaltum, and if this should be damaged by wrenches or other means it shall be replaced before the ditch is filled in.

DONE AND PASSED in Council this 11th day of September, A.D. 1923.

D. M. DUGGAN,
Mayor
CHAS. ED. K. COX,
City Clerk.

BY-LAW No. 34, 1921

1 By Law Respecting Into Filling Stations

The Municipal Council of the City of Edmonton, duly assembled, enacts as follows:

1 Notwithstanding the provisions of By-law No 24 1917 any liquid fuel for use in connection with automobiles may be stored on any premises in larger quantities than one barrel, when kept in an approved and properly constructed steel tank which is embedded in concrete placed below ground with no part of the tank covered with less than three feet of earth and 1 practicable entirely outside of any and all buildings such tank to be filled by a pipe extending to the surface of the ground or roadway only where such tank is already installed with approved screw cap and lock at the top, said liquids to be drawn from the said tank by properly constructed pipes and pumps.

2 Prior to the undertaking of any work of this kind plans showing the location together with specifications and drawings showing the construction of the tank shall be submitted to the Inspector of Buildings, and his approval to such location specifications and drawings obtained and a permit to install in the location indicated on the plan approved by the Board of Commissioners.

3 Where for the purpose of delivering any such liquid fuel it is necessary or convenient to place any pipes or apparatus over or across any part of any highway a further plan showing the location of such pipes or apparatus shall be filed with the Inspector of Buildings before the same are placed in position who shall submit the same

to the Commissioners for their approval, and on such approval being given, the Inspector shall issue a permit for the installation of said pipes or apparatus.

4. No permit shall be issued to install any such pipes or apparatus over or across any highway or part thereof, along which a street railway or tramway line is located, or within thirty feet of the nearest street or avenue intersection nor shall any permit be issued to install any auto-filling station within one hundred yards of any other such installation.

5. No permit shall hereafter be issued for the installation of any curb pumps or other apparatus for the delivery of liquid fuel, which requires the use of a portion of the sidewalk or roadway but all pumps shall be located on private property and all liquid fuel shall (except in cases of present installations) hereafter be delivered through an overhead pipe which shall swing over the sidewalk and return automatically to the face of the building when not in actual use. The horizontal portion of such pipe which swings over the sidewalk shall not be less than nine feet above the sidewalk.

6. All auto-filling stations or other apparatus for the delivery of liquid fuel heretofore erected or placed in or upon any highway and which have been installed without the consent of the proper civic authorities, shall be discontinued within ten days of the passing of this By-law unless the owner or operator shall obtain a permit, as hereinbefore provided, and all such stations or other apparatus erected or placed with the consent of the City upon any highway upon which street railway or tramway lines are located or within thirty feet of any street or avenue intersection, shall be removed within

two months from the date of the passing of this By-law

7 All air lines or other devices for the supplying of air or water to motor vehicles now or hereafter constructed, shall be reconstructed or constructed so that the pipe for delivering the air or water shall be either under the sidewalk, in which case the provisions of sections II and III shall ~~mutatis mutandis~~ apply and be observed, or in cases where the air is delivered through or by means of a flexible hose, such hose shall be attached to a device which will automatically withdraw the same from the sidewalk and within the premises of the person supplying such air or water, or they may be delivered by overhead pipes in which case the above provisions regarding the installation of apparatus for the delivery of liquid fuel shall apply

8. The annual fees for stations for the supply of liquid fuel shall be as follows —

	<i>First Fire Limits</i>	<i>Outside First Fire Limits</i>
Where curb pumps or other obstruction is placed on the sidewalk	\$50.00	\$35.00
Where no obstruction is placed on the sidewalk	\$35.00	\$20.00

All sums paid by the present holders of permits shall be credited on account of the above fees, provided such permit holder shall continue to operate his installation. In the event, however, of any present permit holder wishing to discontinue his present installation, he shall be entitled to a rebate of one-half of the fees already paid by him.

9. In case of non-discontinuance or non-removal of any auto-filling station or any apparatus

above mentioned in respect of which a permit has not been obtained the person maintaining the same after the time heretofore limited shall be liable to a penalty of five dollars for each and every day the same shall be continued which shall be recovered with costs and enforced as provided for in the Education Charter.

10. In the event of any installation of the kinds herein mentioned either by reason of its location, construction, use or in any other way becoming a nuisance or in the opinion of the Commissioners unreasonably obstructing or interfering with the use of any highway or part thereof the Commissioners shall give notice in writing to the person maintaining or operating such installation to remove the same from the highway or to discontinue the use of the highway in connection therewith. Every person maintaining any such installation within over or upon any highway after the expiration of said period of fifteen days or making use of any highway or part thereof in connection therewith after the expiration of such period shall be liable to a penalty of five dollars for each and every day such installation is continued within over or upon any highway or any highway is used in connection with any such installation which penalty shall be recovered and enforced as provided for in the Education Charter.

11. By-laws Nos. 437 and 41, 1919, are hereby repealed.

Done and Passed in Council this twenty-fifth day of July, 1921.

(Signed)

D. M. DUNCAN,

Mayor

CHAS. ED. K. COX,

City Clerk

(SEAL)

CITY OF EDMONTON TELEPHONE DEPARTMENT

RULES AND REGULATIONS

1. *Telephone Instruments and Connecting Wires* are furnished to subscribers for use in accordance with rules prescribed by the Department from time to time and are to be used only by the subscriber, his agent or employees when engaged upon his business. The equipment must not be used for receiving or delivering any communication in respect of which a consideration has been or is to be paid by any other party except as permitted by the rules of the Department.

2. *Unlimited Telephone Service* will not be furnished where the equipment is accessible to the general public. Where the traffic originated by general public on any telephone exceeds that of the subscriber, the Department shall have the right to change the location of the equipment without notice.

3. *Subscribers* are not allowed to transfer the Telephone Number assigned to them, their service, or their contract to any other party unless arrangements are made in advance with the Department.

4. *The Wires and Instruments* over which service is furnished, together with the telephone numbers remain at all times the property of the Department and subscribers must not allow any mechanical or electrical apparatus to be connected with said wires and instruments without the consent of the Department.

5. *The Initial Installation* period shall be for three months' service unless otherwise specified. Payment must be made in advance and no rebate

or allowance will be made on any initial payment for service.

9. *All Accounts* are due and payable when rendered, and payment should be made not later than the fifteenth (15th) day of the current month. To accounts remaining unpaid thirty (30) days after date rendered, a deferred payment charge of fifty cents will be added. If rentals on current quarter's service remains unpaid at 30th day of first month of any quarter, service may be discontinued. In case service is discontinued for non-payment of rental, \$1.00 shall be charged for re-connection.

7. *Breakages and Damages* The subscriber shall be liable for all breakages or damage to the Telephone Equipment, except from unavoidable accidents.

8. *The Department* shall endeavor to render continuous service but shall not be liable for interruptions due to causes beyond the Department's control.

9. *Rebate for Loss of Service.*—No rebate for interruption to service can be made unless written notice is given to the Department immediately after such interruption has been repaired, and no rebate for interruptions will be allowed unless both "in" and "out" has been unavailable for a period of 36 hours.

10. *The Use of Profane or Abusive language* over the Department's telephone equipment is prohibited. Persons using the equipment to the annoyance of other subscribers are liable to prosecution.

11. *The Minimum Charge* for Business or Residence Service is \$7.00 and \$5.00 respectively. These charges are made on periods of one day to one month. Extension of the Minimum Charge

over one month will be allowed at monthly proportionate rates.

12 *The Department* will not supply Residence or Domestic Service to any premises where any business for profit is carried on unless Commercial Service has already been contracted for. Premises is hereby defined as any building or portion thereof.

13 *Temporary Disconnection* — After one year's continuous service a subscriber, owing to the temporary closing of his residence, may have his service discontinued for a period not exceeding three months without cancelling contract or having telephone removed if arranged and paid for in advance. This arrangement carries with it traffic and information service.

14 *If a Telephone* installed for service at the Residence Rate be used for the purpose of a business or profession, the Department may charge the business rate for such service without regard to the date to which the subscriber has paid for service at the Residence rate. This also applies to subscribers, for Residence service only who advertise their telephone number in connection with any business.

15 *Moves and Changes* — The telephone is first located where subscriber directs and must not be moved or interfered with. When the subscriber desires to have the telephone moved to another location, notice must be given in writing at least two days before the move is required. All moves and changes shall be charged at standard rates, fixed from time to time.

16 *Notice of Discontinuance of Service* on the part of the subscriber is only valid when made in writing and such should be received by the

Department at least six days before the end of any subsequent rental period.

17. *Telephone Numbers* A subscriber's telephone number is not a part of the application or contract for service and it may be changed by the Department at any time where the requirements of the service so demand.

18. *Directories* The new year's issue of subscriber's telephone directories shall be published from time to time. These directories are at all times the property of the Department and are loaned to subscribers for their convenience and not as a part of any contract. The Department assumes no liability whatever because of errors or omissions in any copy of the book. Subscribers shall be supplied with one copy of each issue for each automatic telephone in service; additional copies shall be paid for by the subscriber. Each subscriber is allowed one line in the directory under the alphabetical list. Each Business telephone is allowed one line in the classified listings. All other listings shall be charged for at the Department's standard rates.

19. *Joint Users* A joint user is defined as one who has obtained permission from a subscriber for the use of his service. For such Business service the Department shall charge an annual rental of \$20.00 payable quarterly in advance. For such Residence service the Department shall charge an annual rental of \$5.00 payable in advance. Joint users of telephone service will have similar privileges in the telephone directory as subscribers for direct line service.

20. *Extra Listings* are inserted in the directory under the telephone number of the direct line subscriber. Such extra listings are allowed only where one interest is responsible, and are not

allowed for separate companies or business. The charge for one extra listing in the alphabetical columns of the directory is \$2.00 per issue. The charge for one extra listing in the classified columns of the directory is 50 cents per issue.

21. *Subscribers* are supplied with all telephone apparatus necessary for good service, therefore the attachment of the various unauthorized devices offered for sale, which are supposed to eliminate noise improve the transmission, replace telephone directors, etc., cannot be permitted. All such devices are unnecessary and many are detrimental to the service. They are made simply to sell and with the completion of the sale the selling agent's interest ceases. Should unusual conditions necessitate the use of special apparatus the Department will be glad to furnish same at reasonable rates.

22. *Discounts* 5 per cent discount will be allowed on all bills for actual telephone rentals if paid on or before the 10th of current quarter. No discount will be allowed on the initial payment for telephone service.

23. *Temporary Construction* Any applicant for service whose premises are more than 500 feet distant from that point where the Department's standard construction exists will be required to pay the additional labor and construction costs involved in the installation of the service.

24. *Wiring in New Buildings* Where telephone service may be required in Blocks, Warehouses, and large residences, the owner must have installed during the course of construction, special telephone conduits, and the necessary fittings satisfactory to the Department, at his expense.

All other wiring charges will be borne by the Department.

25. *Labor Charges on Extensions.* Where the cost of any extension to existing equipment is considered by the Superintendent of the Department to be excessive in comparison with rental returns, the installation cost will be charged to the Subscriber.

26. *Any Violation* of any of the rules and regulations herein contained shall automatically cancel the Department's contract with Subscriber.

APPROVED BY CITY COUNCIL.



